INTERIOR DEPARTMENT APPROPRIATIONS FOR 1954

HEARINGS

BEFORE THE

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES

EIGHTY-THIRD CONGRESS

FIRST SESSION

UNIV. OF MICH.
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SUBCOMMITTEE ON INTERIOR DEPARTMENT

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CARSON W. CULP, *Executive Secretary to the Subcommittee*

PART 2

Printed for the use of the Committee on Appropriations

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INTERIOR DEPARTMENT APPROPRIATIONS FOR 1954

TUESDAY, MARCH 10, 1953.

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MORRIS F. de CASTRO, GOVERNOR OF THE VIRGIN ISLANDS
THOMAS G. MOONEY, DIRECTOR, VIRGIN ISLANDS PUBLIC WORKS

Mr. JENSEN. The committee will come to order. Mr. James P. Davis, Director of the Office of Territories, is before the committee this morning. We are glad to see you, Mr. Davis.

Mr. DAVIS. Thank you very much, sir.

Mr. JENSEN. And I see the Governor of the Virgin Islands here.

Governor DE CASTRO. Yes, sir.

Mr. JENSEN. We are indeed glad to see you, Governor.

Governor DE CASTRO. Thank you, sir; I am glad to be here.

Mr. JENSEN. I am sure that Mr. Kirwan will bear me out when I say we enjoyed the visit we had in the Virgin Islands a year ago last Eastertime, and we want to thank you for the fine hospitality that you so willingly rendered us. We really enjoyed the wonderful climate of the Virgin Islands.

Governor DE CASTRO. We want you to come again, sir.

Mr. JENSEN. We will try to do that.

Governor DE CASTRO. To see the changes there now.

Mr. JENSEN. We will talk about that later, but right now I do want you to know that the Virgin Islands is one place I want to visit again.

Mr. Davis, I presume you have a statement.

GENERAL STATEMENT

Mr. DAVIS. Mr. Chairman, I have a very brief statement which will take only a couple of minutes of the committee's time.

I would like to touch the highlights of it, however.

It is a pleasure to meet again with this committee. This is the sixth or seventh time, I think, that I have had that privilege, and I have always found it a stimulating and an interesting experience, and I think this committee has distinguished itself by its fairness and its understanding of the problems we have presented.

While this statement will be brief, we shall be glad to furnish such detailed information concerning territorial programs as the committee may desire.

May I first review the areas of responsibilities delegated to the Office of Territories: (1) liaison and representation in Washington on behalf of the Territories; including preparation of legislation, testifying before congressional committees, and contracts with other Federal agencies on behalf of all the Territorial governments; (2) direct supervision of the governments of both American Samoa and the Trust Territory of the Pacific Islands, and a number of minor islands in the South Pacific; (3) management and supervisory responsibilities for The Alaska Railroad, the Alaska Road Commission, care of the Alaskan insane, the Alaska and Virgin Islands public-works programs, and the Virgin Islands Corporation.

Considerable progress has been made to promote the social, economic, and political advancement of each Territory. Hawaii, Puerto Rico, and Guam have practically reached the goal of self-government and self-sufficiency. Alaska needs help primarily because of its strategic importance and also the urgent need of substantial capital investments not otherwise possible. The Virgin Islands have made much progress and might become self-supporting if locally paid Federal taxes were made available to them as in some of the other Territories. American Samoa and the trust territory will require continued support for many years because of their limited resources, undeveloped agricultural and industrial potential, and inadequate transportation. Frankly, the economy of these areas is not and will not be for a long time adequate to provide even minimum standards of education and health.

Although much of our requests are of a routine character and cover normal operations, there are some that should be singled out because they represent noteworthy changes or increased activities. I refer to these in closing:

(1) At the urgent request of the Department of Defense, we are again asking funds for the reconstruction of the balance of the Seward-Portage line and for docks at Seward.

(2) Funds to complete the St. Thomas power program are being requested by the Virgin Islands Corporation.

(3) Authority is asked to use any remaining funds from the liquidation of the ITC, after the amounts owed to the Federal Government are paid, to finance local trade where necessary to assure continuity of trading activities.

That, of course, is in the Trust Territory of the Pacific.

(4) Funds are asked for immediate removal of trust territory headquarters from Honolulu and construction of facilities at Dublon Island in the Truk Atoll.

(5) The trust-territory request has been reduced following the transfer of Saipan and Tinian to naval jurisdiction on January 1, 1953.

(6) The Guam budget has been reduced by deletion of the amount

previously granted for transportation of Guam government employees to and from the States.

(7) We request $15,000,000 for urgently needed public works in Alaska and $1,100,000 for the public-works program in the Virgin Islands.

The committee will note that those amounts do not take account of any revisions or reductions that may be agreed upon or requested by the Department and approved by the Bureau of the Budget. We, of course, do not know at this time what the attitude of the Bureau of the Budget would be on those requests.

That completes the little statement I wanted to make, Mr. Chairman. I am ready to proceed with the individual items as you see fit.

Administration of Territories

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$7,166,700	$9,320,287	$3,910,000
Reimbursements from other accounts	2,755	400	400
Total available for obligation	7,169,455	9,320,687	3,910,400
Unobligated balance, estimated savings	−13,535	−270,000	
Obligations incurred	7,155,920	9,050,687	3,910,400
Comparative transfer to "Trust Territory of the Pacific Islands, Office of Territories"	−4,267,584	−5,223,750	
Total obligations	2,888,336	3,826,937	3,910,400

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
1. Territory of Alaska:			
(a) Governor's office	$85,357	$112,760	$102,000
(b) Legislative expenses		48,000	
(c) Care and custody of Alaskan insane	523,900	559,600	559,600
2. Territory of Hawaii:			
(a) Governor's office	36,985	42,216	42,200
(b) Legislative expenses		46,700	
3. Virgin Islands:			
(a) Governor's office	282,399	313,250	372,000
(b) Grants to municipalities	745,000	745,000	745,000
(c) Agricultural assistance	47,849		
4. Guam:			
(a) Governor's office	55,191	63,700	58,500
(b) Legislative expenses	22,980	23,300	23,300
(c) Administration of sec. 26 (c), Public Law 630, 81st Cong	149,945	150,000	
5. American Samoa:			
(a) Governor's office	46,932	50,254	56,400
(b) Grants	563,104	1,290,000	1,534,000
(c) Legislative expenses	12,384	27,000	27,000
(d) Chief Justice and High Court	24,684	33,675	32,600
6. Canton Island administration		17,000	17,200
7. General administration	288,871	304,082	340,200
Total direct obligations	2,885,581	3,826,537	3,910,000
Obligations Payable Out of Reimbursements From Other Accounts			
3. Virgin Islands: (c) Agricultural assistance	1,187		
5. American Samoa: (a) Governor's office	524		
7. General administration	1,044	400	400
Total obligations payable out of reimbursements from other accounts	2,755	400	400
Total obligations	2,888,336	3,826,937	3,910,400

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions	222	307	222
Full-time equivalent of all other positions	35	30	31
Average number of all employees	240	326	240
Average salaries and grades:			
General schedule grades:			
Average salary	$5,560	$5,570	$5,687
Average grade	GS-8.0	GS-8.0	GS-8.2
Crafts, protective, and custodial grades:			
Average salary	$2,580	$2,646	$2,674
Average grade	CPC-2.5	CPC-2.5	CPC-2.5
Ungraded positions: Average salary	$401	$715	$482
Personal service obligations:			
Permanent positions	$679,580	$810,011	$733,586
Part-time and temporary positions	32,731	36,510	37,310
Regular pay in excess of 52-week base	1,454	2,628	2,828
Payment above basic rates	81,829	88,280	89,346
Total personal service obligations	795,594	937,429	863,070
Direct Obligations			
01 Personal services	794,363	937,429	863,070
02 Travel	169,418	158,853	60,667
03 Transportation of things	21,591	65,925	4,000
04 Communication services	13,705	10,550	10,720
05 Rents and utility services	2,209	3,750	3,750
06 Printing and reproduction	11,696	14,670	17,850
07 Other contractual services	529,022	568,280	631,764
08 Supplies and materials	30,414	22,514	26,989
09 Equipment	2,324	6,534	9,164
11 Grants, subsidies, and contributions	1,310,134	2,037,000	2,281,000
15 Taxes and assessments	705	1,032	1,026
Total direct obligations	2,885,581	3,826,537	3,910,000
Obligations Payable Out of Reimbursements From Other Accounts			
01 Personal services	1,231		
02 Travel	645		
04 Communication services	355	400	400
08 Supplies and materials	524		
Total obligations payable out reimbursements from other accounts	2,755	400	400
Total obligations	2,888,336	3,826,937	3,910,400

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$167,619	$271,735	$222,022
Obligations incurred during the year	7,155,920	9,050,687	3,910,400
	7,323,539	9,322,422	4,132,422
Deduct:			
Reimbursable obligations	2,755	400	400
Unliquidated obligations, end of year	271,735	222,022	232,022
Total expenditures	7,049,049	9,100,000	3,900,000
Expenditures are distributed as follows:			
Out of current authorizations	6,902,162	8,900,000	3,650,000
Our of prior authorizations	146,887	200,000	250,000

Mr. JENSEN. Yes. Turning to page 3 of the justifications which is headed, "Analysis by activities," we will include that page in the record without objection.

(The matter referred to is as follows:)

Analysis by activities

Activities	Adjusted appropriation	Decreases	Base, 1954	Estimate, 1954	Increases
1. Territory of Alaska:					
(a) Governor's office	$112,760	$15,000	$97,760	$102,000	$4,240
(b) Legislative expenses	48,000	48,000			
(c) Care and custody of Alaskan insane	559,600		559,600	559,600	
2. Territory of Hawaii:					
(a) Governor's office	42,216	16	42,200	42,200	
(b) Legislative expenses	46,700	46,700			
3. Virgin Islands:					
(a) Governor's office	313,250		313,250	372,000	58,750
(b) Grants to municipalities	745,000		745,000	745,000	
4. Guam:					
(a) Governor's office	63,700	9,564	54,136	58,500	4,364
(c) Legislative expenses	23,300		23,300	23,300	
(e) Administration of sec. 26 (c) Public Law 630, 81st Cong	150,000	150,000			
5. American Samoa:					
(a) Governor's office	50,254		50,254	56,400	6,146
(b) Grants	1,290,000		1,290,000	1,534,000	244,000
(c) Legislative expenses	27,000		27,000	27,000	
(d) Chief justice and high court	33,675	1,235	32,440	32,600	160
6. Canton Island administration	17,000		17,000	17,200	200
7. General administration	304,082		304,082	340,200	36,118
Total	3,826,537	270,515	3,556,022	3,910,000	353,978

Territory of Alaska

Mr. Jensen. First we have the Territory of Alaska, I see you are asking for an increase in the Governor's office of $4,240. Will you tell us about that increase?

Mr. Davis. That increase, Mr. Chairman, covers an additional $1,240 for temporary employment, due to the higher wage scale being paid throughout the Territory, and $3,000 for the purchase of a new automobile for the Governor. The present automobile is a Buick sedan which will be 6 years old in 1954 and has about 27,000 miles on it. It is estimated that a replacement will cost $3,000 exclusive of the trade-in value of the present car. We feel it would be unfortunate for the new Governor going into office to have to ride around in an old broken-down sedan.

Mr. Jensen. Why would it be any worse for the new Governor than for the old one?

Mr. Davis. Well, Governor Gruening has been there so long that everybody knows that it does not make much difference with him.

Mr. Jensen. The car has been driven only 27,140 miles. It is hardly broken in yet.

Mr. Davis. Off the record.

(Discussion off the record.)

Mr. Jensen. Does the Governor have an airplane?

Mr. Davis. No; he has no other transportation, no boat or airplane.

Mr. Jensen. You cannot get very far in Alaska by automobiles, that is certain. I think it would be much more to the point to buy the Governor a little plane than to spend $3,000 for another automobile. You could put $3,000 on top of that and buy a plane, and he could really get around his Territory, which is a big area. But I am not suggesting that now.

Mr. Davis. It is my understanding that the military authorities and the Coast Guard have both been very kind to the Governor in providing plane and boat transportation when needed to go to other parts of the Territory.

Mr. JENSEN. Now you have care and custody of Alaskan insane. Of course the insane of Alaska are taken care of in Portland.

Mr. DAVIS. At Morningside Sanitarium in Portland under a contract which the committee will recall provides for a base monthly payment plus an increment determined on the basis of the cost-of-living index.

I should like to say, in that connection, that the present contract expires on June 30 of this year and we are now in the process of negotiating a new contract for supplying various other possibilities, such as putting these people in an institution of one of the Pacific Coast States. We have checked with California, Washington, and Oregon, and the Governors of all three of those States have informed us that their institutions are badly overcrowded already, and it would be impossible for them to take on any additional load.

We have also explored the possibility of housing them down in Fort Worth, Tex., in an institution operated by the Public Health Service but we find that the cost of that would be at least 50 or 60 percent higher for housing them there than at Morningside, so it appears to us that the only practical thing we can do is extend the present contract for 2 or 3 years while the future of that operation is being worked out.

Mr. JENSEN. We certainly do not want those insane persons any farther away from their homeland than they are now.

Mr. DAVIS. Yes, that is true.

Mr. JENSEN. In fact, I have often thought that it is almost a crime to take those folks so far away from their own people.

As much as we should not spend any money that we do not absolutely have to spend, I would this minute vote for a sanitarium on the mainland of Alaska to take care of these unfortunate people, and to make it possible for their families to see them oftener than they do now. I presume sometimes their folks never see them from the time they are sent to Oregon until they die, and then possibly they do not see them after they are dead. It is not a very nice thing to think about for this great country of ours.

Mr. DAVIS. I want to complete what I started to say a moment ago, Mr. Chairman.

This new contract we are considering will have to be at a somewhat higher figure than the present contract. Mr. Coe, the present contractor, has been in Washington, and we are sure he will not be able to go on without a rather substantial increase in rate and, in all probability, that will necessitate a request for a supplemental appropriation during the next fiscal year, but we cannot at this time state what that will require.

TERRITORY OF HAWAII

Mr. JENSEN. The next item is "Territory of Hawaii." I note the request is the same for 1954 as it was for 1953. You are requesting for the Governor's office $42,200. Do you have any comments on that, Mr. Davis?

Mr. DAVIS. No, sir; except this, Mr. Chairman, you might not need any of this. If the statehood bill becomes law in its present form

this expense would become unnecessary. The Governor's salary would continue until probably December 31, 1954, but the other expenses would be unnecessary, I mean the legislative expenses.

VIRGIN ISLANDS

Mr. JENSEN. The next item is "Virgin Islands, the Governor's office."

Mr. DAVIS. I am going to ask Governor de Castro to present that with your permission, Mr. Chairman.

Mr. JENSEN. I note that you are asking for an increase of $58,750, Governor, for the fiscal year 1954.

Governor DE CASTRO. Yes, sir.

Mr. JENSEN. Will you explain the reason for that increase?

Governor DE CASTRO. Yes; I have given the prepared statement to the reporter, so I will not read the statement.

(The statement referred to follows:)

GENERAL STATEMENT

Mr. Chairman and members of the committee, the appropriation estimates of the government of the Virgin Islands, for the fiscal year 1954, are in two sections, i. e.:

(1) The cost of administering the central government of the islands	$372,000
(2) Grants to the municipality of St. Thomas and St. John, and to the municipality of St. Croix	745,000
Total	1,117,000

The amount of $372,000, requested for the cost of the central government of the islands, is $58,750 greater than the actual appropriation for the fiscal year ending June 30, 1953. The amount of $745,000 requested for grants to the two municipal governments is exactly the same as the actual appropriation for the present fiscal year.

The increase of $58,750 requested in the appropriation item for the central government is earmarked entirely for the commencement of a program of repairs and rehabilitation of Federal buildings under the jurisdiction of the government of the Virgin Islands. No part of this increase represents any additional operating costs. Therefore, the basic appropriation item requested for the operating expenses of the insular government of the Virgin Islands is the same as this year's appropriation.

Before explaining the new item for repairs and rehabilitation of Federal buildings, let me briefly say what the basic appropriation estimate includes each year. The Organic Act of the Virgin Islands, passed by Congress in June 1936, provides that the salaries of all executive officers and employees appointed by the President or by the Secretary of the Interior shall be paid from funds appropriated for the government of the Virgin Islands by Congress in annual appropriation acts. The annual appropriation therefore includes, in accordance with law, the salaries and maintenance expenses of the following services: (1) Office of the Governor, (2) office of the government secretary, (3) office of the administrator for St. Croix, (4) office of the administrator for St. John, (5) the major departmental staff, and (6) equipment, maintenance, and routine repairs of Federal buildings and grounds, including maintenance of government house in St. Thomas, and in St. Croix, travel, stationery, light, water, and other miscellaneous expenses.

The operating program of the government of the Virgin Islands includes the following functions: (1) Administrative, including the central direction of the insular government of the Virgin Islands, as well as of the two municipal governments of St. Thomas and St. John, and of St. Croix; (2) fiscal and accounting, including disbursement and procurement for the central government and the two municipal governments; (3) top supervision of all medical activities, including an integrated program of public health and medical care; and also including leprosy control; and (4) top supervision of public education, public works, and social welfare.

Briefly, the program plans of the government of the Virgin Islands include (1) execution of the laws of the United States applicable to the Virgin Islands; (2) execution of the laws and ordinances of the government of the Virgin Islands; and (3) supervision and control of administrative departments and bureaus. The goal of the government of the Virgin Islands is greater prosperity and economic stability of the islanders through the coordinated efforts of the government and the local communities. The development of tourism, the expansion and furthering of agriculture, and the inducement of industries are the paths of economic progress for the Virgin Islands.

For the fiscal year 1954 we are requesting the sum of $58,750 for the beginning of a program of repairs and rehabilitation of 10 separate, federally owned buildings under the jurisdiction of the governmnet of the Virgin Islands. This sum will be used to begin repairs on 3 of 10 buildings, i. e., the government house in St. Thomas, the government house in St. Croix, and the administration building in St. Thomas.

The government house in St. Thomas, which is the residence as well as the office of the Governor, and located in the capital of the Virgin Islands, is a 3-story brick-faced masonry structure which was completed in 1867. The building, which is of great historic value, was last completely renovated in 1938. It is in need of major repairs. The wooden storm shutters are rotted and must be replaced with metal sash and shutters. The salt-water plumbing throughout the building is in very poor condition, and the electrical wiring needs major overhauling. The linoleum on the floors is rotted, pock marked and deteriorated. It is planned to obligate $25,000 for renovation of the sanitary facilities, including plumbing; repairs to electrical facilities; repairs to exterior walls; and installations of new windows, window frames, and storm shutters. Additional work would have to be accomplished on this building in the succeeding fiscal year.

The government house in St. Croix, which is used as living quarters of the Governor when he is in residence on that island, is the headquarters for the legislature and the district court, as well as to house the offices of the administrator, the department of finance, the department of education, and other offices, was built in 1774 and enlarged in 1830, and last rehabilitated in 1940. This is a three-story building with stone masonry walls. It carries a historic value that is far greater than its estimated replacement cost of one-half million dollars; and is now a national historic site so declared last year by the National Park Service.

Of particular note, I want to mention that in August 1952 the Danish Government donated to the government of the Virgin Islands, representing the United States, an impressive replica-collection of original furniture taken to Copenhagen in 1917 under the sales treaty of these islands from the banquet hall of government house in St. Croix. This gift from Denmark was in commemoration of 150 years of uninterrupted diplomatic relations between the 2 nations.

It is planned to obligate $28,750 in the fiscal year 1954 for repairs to 346 windows and doors; major repairs to the electrical system, including replacement of conduits; replacement of plumbing; and scraping, plastering, and pointing walls; and interior and exterior painting.

The administration building in St. Thomas, which houses the offices of the government secretary and the department of finance, was constructed about the year 1846. It was last renovated in 1938. While structurally sound, the building is in need of immediate repairs. It is planned to obligate $5,000 in 1954 for repairs to the sanitary facilities, including salt-water plumbing, and repairs to the electrical facilities. Additional work will have to be accomplished in the following fiscal year.

I urgently plead that this additional appropriation of $58,750 be allowed for the proper safeguarding of these three important structures. Their preservation is highly justified, and their historic value alone far exceeds the cost of the necessary repairs and rehabilitation.

As stated, the appropriation of $745,000 for grants to the two municipalities represents the difference between the cost of operation of the municipal governments of St. Thomas and St. John, and of St. Croix; and their operating revenues from local sources. For the fiscal year 1954, revenues to be collected locally, including real property taxes, income taxes, trade taxes, automobile and gasoline taxes, harbor and customs fees, internal revenues, and other miscellaneous taxes, are estimated to amount to $1,879,000, to which would be added the Federal grant of $745,000, making the total operating cost of the two municipal governments to be $2,624,000.

By functions of government, the expenditures are divided into legislative, judiciary, public safety, public works and utility, health and medical care, social

welfare, public education, and promotion and regulatory activities. The legislative branch of the government of the Virgin Islands includes 2 municipal councils in the separate municipalities, an insular legislative assembly, and 2 municipal committees. The executive branch consists in the two separate municipalities of the operation and maintenance of police courts and prison departments; fire departments; health departments including 3 hospitals and several public-health clinics, a leper asylum, 2 homes for the aged, institutional care for the mentally ill, sanitation services, social welfare department including child welfare, a juvenile school, public education, public works, tax assessments, public libraries, a harbor department, and miscellaneous facilitating services.

There has been a progressive increase in local revenues resulting both from the improvement of the economic condition as well as the new taxes which have been levied by the local legislatures. The increased cost of the two municipal governments of the Virgin Islands, necessitating the continuance of the Federal grants has been made necessary by the approval of a new pay plan for the Virgin Islands municipal civil service. The municipal governments were losing their best employees because of the greater and more lucrative employment opportunities in Federal agencies and in private operations. Under the pay plan which was in effect in the islands prior to July 1, 1952, average salaries paid to policemen were $88 per month; to switchboard operators, $93 per month; to elementary-school teachers, $100 per month, $114 per month to graduate nurses and typists; $155 per month to high-school teachers, and $188 per month to high-school principals. Messengers in Federal offices in the Virgin Islands have received salaries equal to those paid by the municipalities to their high-school principals. Supervisory clerks in Federal offices have received as much pay as most of the municipal department heads.

Funds for the new pay plan were made available from new taxes as well as from increased yields in existing revenue sources. For the fiscal year 1954, increases in local revenue will be used for (1) further modifications of civil-service pay of municipal employees, and (2) necessary additional costs of operation and maintenance of the new, modern hospitals at St. Thomas (116-bed), Christiansted (60-bed), Frederiksted (12-bed), and Cruz Bay, St. John, with 4-bed capacity.

Here are some brief statistical facts. We maintain—

(*a*) 31 public schools, including kindergartens, with 186 teachers and 5,791 students;

(*b*) 59 miles of paved roads, and 171 miles of dirt roads, also 33 miles of streets;

(*c*) 17.2 miles of public salt-waterlines;

(*d*) 15.2 miles of potable-water lines;

(*e*) the hospital on the island of St. Thomas serviced by 9 doctors with minimum patient-load of 3,072 patient-days; 2 hospitals on the island of St. Croix serviced by 6 doctors with a minimum patient-load of 3,840 patient-days; a home for indigents on St. Croix and another on St. Thomas with a total of approximately 120 inmates, and a Hansen's-disease (leprosy) hospital on St. Croix with about 18 patients. The cost per patient per day ranges from $4.62 at the St. Thomas hospital to $7.22 at the Frederiksted hospital. The average ration rate per day ranges form a low of $0.49 to a high of $0.97.

May I conclude by stating that for the past several years we have not asked for any increase in this appropriation, nor have we done so for 1954. We have not been able to reduce the appropriation, however, because of necessary increased operating costs just referred to. When I assumed the governorship 3 years ago, I stated that I would not at any time request an increase in this appropriation. I have kept that pledge.

This appropriation may be eliminated entirely when the Congress grants us the return to our treasury of the Federal internal revenue taxes on liquours produced in the islands and shipped to the United States. Until that time, we shall need the annual Federal grant to assist us in adequately maintaining our institutions and essential services.

ADMINISTERING THE CENTRAL GOVERNMENT OF THE ISLAND

REHABILITATION OF FEDERAL BUILDINGS

Governor DE CASTRO. The increase is in the cost of administering the central government. It is not really the Governor's office alone. It is the cost of administering the central government and is for repairs and rehabilitation of three important buildings which I think you saw when you were down there, Mr. Chairman.

There is no request for any increase in the operating cost of the government. The appropriation remains the same as it was last year.

We are requesting $58,750 to begin a program of rehabilitation of the government house in St. Thomas, the government house in St. Croix, and the administration building in St. Thomas.

Those are three Federal buildings which are well over 100 years old. They were last rehabilitated in 1939 and 1940, and they are urgently in need of major work to put them in decent condition. The work is detailed in the justifications. In the case of the government house in St. Thomas, I will pass you some photographs showing the major bad conditions. We need major repairs there. This building has greatly deteriorated in the past 12 or 13 years.

The wooden storm shutters are rotted; the roof needs major repairs, and the conduits and plumbing all need complete rehabilitation. We plan to spend $25,000 on those repairs.

The government house in St. Croix is a historic structure. Recently the Danish Government presented us with a complete replica collection of the old Danish furniture in the ballroom in the government house. It has been restored to the condition it was in 100 years ago in the furnishings, and it is probably the most beautiful room in the West Indies. That building also was built in 1774. It was enlarged in 1830 and was last rehabilitated in 1940. It carries a historic value alone far greater than the cost of the repairs.

On that building we plan to spend $28,000 in the new fiscal year for repairs to windows and doors and conditions similar to those existing in St. Thomas. Here are pictures of the conditions in the government house in St. Croix as it is today.

Also included in my statement I bring out the fact that the National Park Service has recently declared a portion of the Christiansted site a national historic site, and the government house is included in the site.

It is very important, in order to maintain the dignity of the Government of the United States in the island, to maintain that property in good condition.

Mr. JENSEN. Right there, Governor, let me ask you this.

Governor DE CASTRO. With pleasure, sir.

Mr. JENSEN. Is the Park Service proposing to spend any money for repairs to the government house at St. Croix?

Governor DE CASTRO. No, sir, the Park Service, as I understand it, will merely keep possibly two guides with literature in the old Danish Fort in Christiansted to give information to visitors who come there as they do in our national parks.

Mr. JENSEN. So that there will be no overlapping expenditures there?

Governor DE CASTRO. No, sir. I checked that carefully; and, as a matter of fact, the Park Service checked our estimates for repairs to these buildings, and there is no overlapping.

Mr. JENSEN. All right; go ahead, Governor.

Governor DE CASTRO. The third building is the administration building in St. Thomas which houses the other officers of the government. That building was constructed in 1846, and also last renovated in 1938. This [indicating] is a picture of the roof of the building, and showing its general location, and these [indicating] are some of the conditions in the building which need prompt repair and restoration.

Mr. JENSEN. Where is this building?

Governor DE CASTRO. This is the administration building in St. Thomas. This is just below and to the east of the government house. This is where all of the administrative officers except the Governor are located.

Mr. JENSEN. Yes, I remember that.

Governor DE CASTRO. Yes, sir. On that building we plan to spend $5,000 to begin repairs to plumbing and electric facilities.

That, Mr. Chairman, constitutes the increase for next year for major rehabilitation of our three Federal public buildings. There is no increased operating cost shown in that estimate.

GRANTS TO MUNICIPALITIES

Mr. JENSEN. The next item is "Grants to municipalities," $745,000.

Governor DE CASTRO. Mr. Chairman, that amount remains the same as it has been for the past 3 or 4 years.

Three years ago, when I was inaugurated as Governor, I made the statement that I would not at any time ask for an increase in that appropriation. Despite the fact that we needed more money I lived up to that pledge. I do not know how long my successors will be able to, but I have lived up to that pledge and have asked no increase in that appropriation since the beginning of my term of office.

We have needed new moneys for the cost of a new pay plan for the civil service of the Virgin Islands where the salaries up to June 1952 were exceedingly low.

We have obtained funds for this purpose in the amount of approximately $200,000 by increasing the local revenue. The local revenues are greatly increased both by new taxes and by improved economic conditions over what they were.

REVENUES AND EXPENDITURES

Mr. JENSEN. Without objection I would like to insert in the record pages 12, 13, and 14 of the justifications.

(The matter referred to is as follows:)

Budgeted revenues

	Fiscal year 1952	Fiscal year 1953	Fiscal year 1954
Real property tax	$166,000.00	$190,000	$210,000
Income tax	543,000.00	600,795	625,000
Automobile and gasoline tax	96,120.00	119,100	125,000
Import, export, and customs duties	29,800.00	39,360	42,000
Ships' duties, pilotage, steamer, and airplane fees	53,500.00	57,000	58,000
Trade tax, excise duty, and internal revenues	346,459.48	548,951	550,000
Court fees	24,500.00	33,018	33,000
Stamp dues and fees from business	68,900.00	74,500	76,000
Taxes on inheritance	4,000.00	17,000	20,000
Medical service fees	16,000.00	17,500	30,000
Miscellaneous revenues	50,542.00	67,200	70,000
Contributions from special funds	37,500.00	33,500	40,000
Estimated revenues	1,436,321.48	1,797,864	1,879,000
United States contribution	745,000.00	745,000	745,000
Total estimated receipts	2,181,321.48	2,542,864	2,624,000

Summary of expenditures

By functions	Fiscal year 1952	Fiscal year 1953	Fiscal year 1954
Legislative	$74,059.00	$78,582	$81,482
Judicial	15,654.00	17,399	18,399
Executive and staff	143,687.00	181,119	194,919
Public safety	158,087.00	166,980	182,630
Public works and utility	429,733.48	454,000	476,700
Health	571,220.00	615,542	716,778
Social welfare	59,672.00	63,032	68,812
Education	461,087.00	474,818	573,588
Promotional and regulatory	16,602.00	25,980	26,780
Grants and contributions	196,490.00	239,592	240,792
Capital outlay and debt services	55,030.00	43,120	43,120
New pay-plan adjustments		182,700	
Total	2,181,321.48	2,542,864	2,624,000

Summary of expenditures

Purpose of expenditures	Fiscal year 1952	Fiscal year 1953	Fiscal year 1954
Salaries	$1,334,022.48	$1,591,862	$1,610,802
Equipment	50,363.00	49,215	62,515
Maintenance and other	526,116.00	575,975	643,971
Scholarship grants	1,000.00	3,700	6,200
Pensions	3,700.00		
Tax refunds	22,000.00	15,000	33,000
Insurance premiums	8,000.00	8,000	
Repayment of indebtedness	33,030.00	28,120	10,120
Legal defense of indigents	1,350.00	1,350	1,350
Contributions	161,570.00	257,922	252,322
Other special grants	30,170.00	2,220	2,720
Transportation	4,000.00	3,500	1,000
Lump-sum payments (terminal leave)	6,000.00	6,000	
Total	2,181,321.48	2,542,864	2,624,000

Mr. JENSEN. Now, then, according to our information, the local revenues have increased from $1,436,321 in 1952 to an anticipated revenue of $1,879,000 in 1954. At the same time we are asked to continue to appropriate $745,000.

Now, just why should not the appropriations be reduced, since the revenues of the island have increased?

Governor DE CASTRO. I shall be perfectly frank in answering, sir.

The estimate that you have there is our estimate for the next fiscal year, and it does provide for an increase in revenue from local taxes.

We have not asked for a corresponding reduction in our appropriation because of increased costs.

We are opening our new hospitals within the next month. We find that it is going to cost more to maintain these modern hospitals. We have to have modern facilities for them, modern service, and modern equipment, and we have to have sufficient doctors and nurses to staff those hospitals.

Normally we would have asked for an increase in the Federal appropriation, which I was asked to do by our local legislators, and I refused to do it. I said as long as I was there I would maintain the current level of Federal expenditures, but that I would increase the taxes.

With the operating of the new hospital, and we have not gotten in the building yet, and with the operation of our new hospitals which will soon begin construction we feel that we cannot reduce the Federal appropriation, but on the contrary we feel that we must

increase the local revenue, and that we can do without this Federal appropriation as soon as Congress gives us the return of the internal-revenue taxes on products of the islands shipped to the United States.

You will remember, sir, that last year the House passed a bill giving us a good portion of that. I think it was $2,200,000 of Federal internal-revenue tax, but the bill did not pass the Senate, so that we are not getting internal-revenue taxes.

In lieu of getting any portion of those internal-revenue taxes, which should amount to $5 million, or $6 million a year, we are asking you to continue this grant of $745,000.

May I, briefly, point out that under that appropriation we are maintaining 31 public schools, including kindergartens.

Mr. JENSEN. Yes.

Governor DE CASTRO. I want to point that out, because when you think normally of a municipal operation in the States you do not think of them as helping the public schools. Here we are operating on a State level, a county level, and a city level within one government, whereas these things would be thrown into several separate bodies in any State in this country.

We are operating, as I said, 31 public schools, including kindergartens with 186 teachers, and the average salary of those teachers is around $125 to $130 a month, with 5,800 pupils. That is in the three islands of St. Thomas, St. John, and St. Croix.

We are also operating or keeping in condition 59 miles of paved roads, and 171 miles of dirt roads. There, again, you would not normally find that in a municipal budget. That would be in the State budget, but it is part of our government operation.

We are maintaining 17 miles of public salt-water lines. As you know, we use salt water there exclusively for fire protection and for toilets.

We are operating 15.2 miles of potable-water lines. That is the new fresh-water system, Mr. Kirwan, that you inquired about a little while ago before the hearings started. This system furnishes fresh water now to St. Thomas, to the new hotel, and to many of the new businesses and in St. Croix to one of the hotels in the city and to the consumers there.

We are maintaining a hospital on St. Thomas which we are now going into, a beautiful building, a 116-bed hospital, with 60 medical, 13 mental, and 26 TB beds, with 9 doctors. There are 2 hospitals on the island of St. Croix with 6 doctors, with 1 at Christiansted where we are about to move into the new building, which is a 60-bed hospital. There is 1 in Frederiksted which has just been finished, which is a 12-bed hospital and public-health clinic. There we have six doctors.

We have already moved into the new little clinic on the island of St. John, which is a four-bed clinic. This is for transitory patients only.

We are maintaining a home for indigents with about 120 inmates in it. We are also maintaining a leprosy hospital on St. Croix which now has about 18 patients.

It may interest you to know that the cost per patient per day, even with the expenditure of $2,600,000, that the cost per patient per day ranges from $4.62 per day at St. Thomas to $7.22 at the Frederiksted Hospital.

The ration rate, the cost of food per day, ranges from a low of 49 cents to a high of 97 cents.

My understanding is that in most hospitals in the United States the cost per patient per day ranges from $15 up. I am indicating this to show the low standard we have.

Let me conclude the answer to your question by stating again that I am not asking for any increase in this appropriation, even though I have been under severe pressure in the islands to do so, as you know from your conferences there. I am requesting that the local taxes be increased.

Mr. JENSEN. I want to say, Governor, that is a very fine and comprehensive statement that anyone could understand, and I certainly think you have done a marvelous job.

Governor DE CASTRO. Thank you, sir.

Mr. JENSEN. I think you are a very conscientious man, and you have done a lot of fine things for the Virgin Islands.

Governor DE CASTRO. That is my home, sir.

Mr. JENSEN. That is your home?

Governor DE CASTRO. Yes, sir.

Mr. JENSEN. One is prone to do his level best for his home, that is sure, and you certainly have done it.

Are there any questions?

COST OF SCHOOL AND HOSPITAL OPERATIONS

Mr. KIRWAN. I want to ask, if I may, that the head of the Office of Territories, Mr. Davis, be instructed to compare the cost of operating the Virgin Islands school system with what it costs to operate the schools in this country as a whole. How many schools did you say you have in the Virgin Islands, Governor?

Governor DE CASTRO. 31 schools.

Mr. KIRWAN. Also, get the hospital breakdown and find out what it costs in small and large communities to operate hospitals in the United States as compared to the cost there. Get all of those things and put them together.

I think the statement the Governor has just made is startling.

Mr. JENSEN. Indeed it is.

Mr. KIRWIN. With the small budget that the Virgin Islands has, it is startling to think that they are operating all of the schools, hospitals, and everything down there for this few million dollars.

Governor DE CASTRO. Including institutions, public safety, medical care, public health, and all.

Mr. KIRWAN. I would like to have that information inserted in the record at this point.

Mr. DAVIS. I shall be very happy to include that information.

I would like to indorse everything that Governor de Castro has said.

Yesterday I was looking at a report from Hawaii, trying to get the expenditures in Hawaii, and they averaged $254 per capita for the whole population, and that does not include expenditures made directly by Federal agencies. In other words, they are spending about 2½ times the amount of money that they are spending in the Virgin Islands.

Mr. KIRWAN. Yes; what they have done is startling.

Mr. DAVIS. I shall be very glad to compile the statement, Mr. Kirwan, which you ask for.

(The matter referred to is as follows:)

HOSPITALS [1]

1951 cost per patient per day

United States: General and special short term	$16.77
Virgin Islands:	
St. Thomas	4.82
St. Croix:	
Fredericksted	5.025
Christiansted	4.68

[1] Source: Figures for the United States from American Hospital Association, Hospital Journal, June 1952, pt. II. Figures for the Virgin Islands from Annual Report of the Governor of the Virgin Islands to the Secretary of the Interior, 1951.

OLD-AGE ASSISTANCE [1]

January 1953 payments for old-age assistance

United States:	
Iowa	$56.80
Oklahoma	66.14
New York	57.98
California	69.48
Ohio	51.48
Idaho	53.96
Virgin Islands	10.94

[1] Source: Figures for United States and the Virgin Islands from Social Security Administration.

SCHOOLS [1]

1950–51 cost per pupil (current expenses)

United States:	
Ohio	$202.00
Idaho	209.00
Oklahoma	211.00
Iowa	248.00
California	277.00
New York	328.00
Virgin Islands:	
St. Thomas	69.67
St. Croix	70.89

[1] Source: Figures for the United States from Office of Education. Figures for the Virgin Islands from Annual Report of the Governor of the Virgin Islands to the Secretary of the Interior, 1951.

1950–51 average annual salary for professional staff

United States:	
Iowa	2,450
Idaho	2,548
Oklahoma	2,928
Ohio	3,285
California	3,840
New York	4,154
Virgin Islands:	
St. Thomas:	
Elementary	1,236
High	1,824
St. Croix:	
Elementary	1,221
High	1,754

TOTAL REVENUES AND EXPENDITURES

Mr. NORRELL. Have you ever ascertained the total overall income and expenditures of the Virgin Islands? What I mean by that is the total taxes that are paid, including everything, even unemployment compensation, and the taxes you pay to the United States, and then the total expenditures, both of this island and of the United States, including social security and everything else.

Do you know what the total expenditures and disbursements are?

Governor DE CASTRO. Well, on expenditures, yes, sir; for the government of the island, that is given here. I do not have at hand the Federal expenditures of other departments.

Mr. NORRELL. Could you insert in the record an itemized breakdown of the entire program, including everything?

I would like to see just what the island is doing and how close you are to being self-sustaining, and then what the United States is doing.

Governor DE CASTRO. Yes.

Mr. NORRELL. How close we come to collecting income in comparison to disbursements and whether you are running in the red or not. I know we have a great income from the island, but I have been on this committee a long time and I have never seen a breakdown of those figures to show exactly the operations of the island. If you can furnish that information, I would like to have it.

Governor DE CASTRO. We have assembled some of that information. I will compile it, with the help of the Territorial Office, almost immediately and send it to the committee after I get back to the islands

(The material referred to follows:)

Consolidated statement of expenditures (appropriations) and revenues pertaining to the Virgin Islands of the United States, fiscal years 1918 to 1949, 1950, and 1951

	Grand total, 1917–51	1918–36	1937–49	1949 supplemental	1950	1951
Acquisition of the Danish West Indies Islands (Virgin Islands)	$25,000,000.00	$25,000,000.00				
Administration, etc., of the Virgin Islands including Federal grants to municipalities (schedule A)	22,605,969.65	8,972,237.10	$8,982,915.13	$149,961.17	$2,080,690.03	$2,420,166.22
Less depreciated value of Bluebeard Castle Hotel transferred to Virgin Islands Corporation	[1] 166,000.00				[1] 166,000.00	
Relief and rehabilitation programs exclusive of the Virgin Islands Company (schedule B)	12,941,679.40	2,101,053.79	10,840,625.61			
Less depreciated value of abattoir transferred to Virgin Islands Corporation	[1] 1.00				[1] 1.00	
Virgin Islands Company-Corporation (schedule B)	7,082,736.00	2,518,843.00	2,417,767.00		2,257,940.00	488,186.00
Virgin Islands public works (Public Law 510 of Dec. 20, 1944, as amended)	6,643,942.00		3,424,428.34	1,539,513.66	680,000.00	1,000,000.00
		(38,592,133.89)	(25,665,736.08)			
Gross totals	74,708,326.05	38,592,133.89	25,665,736.08	1,689,474.83	4,852,629.03	3,908,352.22
Less revenues and repayments related directly to above expenditures (schedule C)	[1] 5,050,688.34	[1] 13,403.60	[1] 3,946,087.42	[1] 89,163.42	[1] 124,167.01	[1] 877,863.89
Net expenditures	69,657,637.71	38,578,730.29	21,719,648.66	1,600,308.41	4,728,462.02	3,030,488.33
United States internal revenues on products of the Virgin Islands:						
United States Internal revenue tax on distilled liquors	[1] 71,533,234.00	[1] 322,798.00	[1] 61,378,620.00	[1] 4,155,075.00	[1] 5,676,741.00	
United States processing tax on sugar	[1] 337,978.15	[1] 337,978.15				
United States excise tax, Sugar Act 1937	[1] 643,020.00		[1] 476,400.00	[1] 106,940.00	[1] 59,680.00	
Total United States revenues	[1] 72,514,232.15	[1] 660,776.15	[1] 61,855,020.00	[1] 4,262,015.00	[1] 5,736,421.00	
Municipal (local) revenues expended exclusive of Federal grants:						
Saint Thomas and Saint John	12,497,828.00	2,140,469.71	8,543,851.94		886,071.79	927,434.56
Saint Croix	6,056,072.60	2,129,998.59	3,139,177.33		355,118.90	431,777.78
Total municipal revenues expended	18,553,900.60	4,270,468.30	11,683,029.27		1,241,190.69	1,359,212.34

[1] Denotes credit figure.

Summary statement of appropriations and expenditures by the Federal Government for administration, etc., of the Virgin Islands of the United States—fiscal years 1918 to 1949, 1950, and 1951

	Grand total	1918–31	1932–36	1937–49	1949 supplemental	1950	1951
Administration, etc., of the Virgin Islands:							
(a) Direct appropriations, 1918–49:							
1918–49	$10,662,097.08	$3,820,113.68	$2,231,372.14	$4,610,611.26			
Central administration	515,983.80				$13,205.80	$225,583.00	$277,195.00
Agricultural stations	103,690.00				2,800.00	50,000.00	50,890.00
Grants to municipalities:							
St. Thomas and St. John	558,400.00					279,200.00	279,200.00
St. Croix	931,600.00					465,800.00	465,800.00
Total direct appropriations	12,771,770.88	3,820,113.68	2,231,372.14	4,610,611.26	16,005.80	1,020,583.00	1,073,085.00
(b) Expenditures by other United States agencies:							
1918–49	7,293,055.15	2,605,573.47	315,177.81	4,372,303.87			
Agriculture:							
Soil conservation service	46,399.00					20,045.00	26,354.00
Production and Marketing Administration	443,594.00					173,601.00	269,993.00
Farmers Home Administration	84,856.00					44,116.00	40,740.00
Commerce:							
Weather Bureau	34,973.28				7,614.33	13,382.81	13,976.14
Bureau of the Census	8,875.00					7,375.00	1,500.00
Civil Aeronautics Administration	353,586.80				63,993.49	150,087.14	139,506.17
Federal Security Agency:							
St. Elizabeths Hospital	306,756.00				304.00	133,556.00	172,896.00
Public Health Service	208,655.00				3,409.00	100,289.00	104,957.00
Maternal, Child Health, etc	357,230.00				100.00	120,260.00	236,870.00
Office of Education	33,521.00						33,521.00
General Accounting Office	48,325.04				31,248.55	17,076.49	
Interior:							
Fish and Wildlife Service	15,090.00					7,924.00	7,166.00
Office of Territories							
Justice:							
Immigration and Naturalization	101,000.00					49,500.00	51,500.00
United States Marshals, etc	94,897.66					47,271.83	47,625.83
National Housing Administration: Loans and grants	22,000.00						22,000.00
Treasury: United States Coast Guard	200,100.00					95,000.00	105,100.00
United States courts	101,941.84				2,501.00	49,482.76	49,958.08
Veterans' Administration	79,343.00				24,785.00	31,140.00	23,418.00
Total expenditures, other agencies	9,834,198.77				133,955.37	1,060,107.03	1,347,081.22
Grand total	22,605,969.65	6,425,687.15	2,546,549.95	8,982,915.13	149,961.17	2,080,690.03	2,420,166.22

EXPENSES OF THE LEGISLATURE

Mr. NORRELL. In your legislative program, I notice on page 13 of your explanation that you are continuing to go up every year and you estimate your needs for 1954 to be $81,482.

Governor DE CASTRO. Yes, sir.

Mr. NORRELL. How many days does your legislature meet down there per year?

Governor DE CASTRO. Our legislature is not restricted to sessions of 30 days a year or 60, as in the case of most of the States. I would say that the legislature itself, in formal meetings, would meet about twice a month or about 25 times a year in formal sessions; that is, each council. We have, as you know, three legislatures. It should be changed, and could be changed only by a new organic act. The Commissioner's Council of St. Thomas and St. John, I would say they meet about 3 times a month in formal session. The committees, of course, they meet every day.

Mr. NORRELL. Every day?

Governor DE CASTRO. Yes, sir. In St. Croix they meet about twice a month.

Mr. NORRELL. I know you could add to that statement, but is not that doing a lot of legislating?

Governor DE CASTRO. Yes, sir. That can be changed and should be changed by providing a single legislature, which is our recommendation. We have recommended a single legislature of 11 members, instead of 16 as we have now.

Mr. NORRELL. What is your population now in the Virgin Islands?

Governor DE CASTRO. A total of 27,000. This legislative setup is topheavy and we recognize it and we have asked for a correction in the new organic act.

Mr. NORRELL. This country certainly does not want to be short with the Virgin Islands, but your population is about the size of an average town in the United States—maybe a little above the average—and I have towns in my district with more population than that.

Governor DE CASTRO. We agree.

Mr. NORRELL. I would say that $81,000 a year is excessive.

Governor DE CASTRO. We agree, and that can only be reduced by a change in Federal legislation.

Mr. NORRELL. The Federal legislation has just gone through. If there was something wrong with it, why was it not corrected then?

Governor DE CASTRO. The organic act did not get a chance to get through the Senate last year. I think it will be introduced again and that hearings will probably be held this year; at least, we hope so.

Mr. NORRELL. We tried to fix that as you wanted it and it appears if there was something wrong with it, it should be corrected.

I do not wish to encumber the record, but I think something should be done about that.

NEW PAY SCHEDULES

You have gone into your new pay plan, but just briefly, what is that at the present time?

Governor DE CASTRO. We organized under a local law a new civil-service rating sheet, similar to what is done in the Federal Government, but much lower. That is our revised pay plan [indicating].

May I say briefly, so you do not have to look for it, that up until July of last year, our policemen were paid average salaries of $88 a month; the switchboard operator, $93; elementary school teachers were paid $100 and graduate nurses were paid $114 a month.

Mr. NORRELL. Is that more or less in line with the salaries that are being paid elsewhere in the islands?

Governor DE CASTRO. In private industry, now with the hotels in operation, yes, sir, but it is much less than is paid by the Federal Government to Federal employees. It is still much lower than the Federal classification schedule.

SPECIAL GRANTS

Mr. NORRELL. On page 14 I notice you have as one item "Contributions" and that you had $161,570 in 1952 and you had $257,922 in this fiscal year. You have a very small increase in the next item of "Special grants." What do you contribute to down there?

Governor DE CASTRO. The contributions item is the way it has to be budgeted by bookkeeping procedures. It is the grant from the local treasury to a special fund to make us eligible for Federal social security and for vocational education. We have to match those funds on a 50–50 basis. These grants are local grants, but then we get matching funds from the Federal Government to pay our public-assistance cases. Also included there is the grant for vocational education, which has been extended to the Virgin Islands. We get $30,000 Federal maximum against a similar grant of local funds.

Mr. NORRELL. You subscribe to that and think it is a good program.

Governor DE CASTRO. Yes, sir. Before we got the Social Security Act for public assistance extended in October of 1951, we were paying our public-assistance cases an average of $2 a month. We are paying them now $7 to $8 a month and anyone can hardly live on that wage of $8 per month.

WAGE RATES COMPARED WITH THOSE IN UNITED STATES

Mr. KIRWAN. I notice your blacksmiths and carpenters received from $1,600 to $2,200 a year; is that correct?

Governor DE CASTRO. Yes, sir.

Mr. KIRWAN. That is listed in range 9 for carpenters and blacksmiths.

Governor DE CASTRO. Yes, sir; they get from $140 per month to $190 per month.

Mr. KIRWAN. There is a big differential between the wages up here in the States proper, with those down there. A carpenter up here gets from 15 to 18 dollars a day. What does he get down there?

Governor DE CASTRO. Our carpenters get around an average—the minimum is 75 cents per hour; for skilled workers, they get around a dollar.

Mr. KIRWAN. Around a dollar an hour?

Governor DE CASTRO. Yes, sir. No, I would say it is lower; about 75 cents an hour.

Mr. KIRWAN. He gets about 75 cents an hour. Up here he would probably get $3 an hour or $2.50.

Governor DE CASTRO. Yes, sir.

Mr. KIRWAN. I notice your draftsmen in range 8 receive from $1,440 to $2,000 per year.

Governor DE CASTRO. Supervisory clerks in the Federal Government service, and even those in the islands, get as much salary as many of our department heads in the municipal government. We pay a harbor master, who has to be a pilot, and a good pilot, for St. Thomas Harbor to bring ships in, $4,200 a year, and a good chief clerk in the Federal service, with the differential for Territorial service, gets more than that. Up until last year we paid our budget director $300 a month, and a grade 5 secretary gets that much. We pay our budget director now under the new pay plan about $350 a month.

Mr. KIRWAN. How do the people feel down there with their new hospital? Are they enthused or satisfied?

Governor DE CASTRO. They are very happy with the new hospitals. They are, naturally, concerned that we set up the best possible type of operation and maintenance of those fine institutions and they discuss them quite frankly. They are satisfied with them and they are very happy we were able to get the new school program started too.

Mr. NORRELL. I would like for the record to show that, frankly, I would like for the entire world to have our standard of living. I know during World War II we had a lot of trouble in some of the South American countries, because we wanted to pay United States wages, and I think we did sometimes.

Governor DE CASTRO. Yes, sir.

Mr. NORRELL. And we almost wrecked the economy of some of those countries.

We have to pay the prevailing wage and try to raise it a little in the countries in which we are operating, but we cannot just go in and hit them hard with the wages we pay here, because their economy will not stand it. That is unfortunate, but it is true.

(Discussion off the record.)

PROCEDURE FOR RAISING REVENUES

Governor DE CASTRO. We have been working on the increase in revenues. We had a tax expert about a year and a half ago making a survey and we have been working on the increase in revenues. The General Accounting Office, at my request, 2 years ago made a comprehensive survey of all the operations in the islands. I do not have their recommendations yet, but with regard to any change in local revenues, we have to deal with two legislatures, in addition to the Governor. We have full democracy. The Governor cannot raise revenues directly. He has to take them to two legislatures and have bills passed. I do not know what the recommendation is, but I am in full accord with the increase in local revenues and an increase in taxes wherever it is possible to get them.

Mr. JENSEN. You say it is necessary to take your revenue bills to two legislatures in order to have them approved. Do you mean they must be considered at two sessions of the legislature? It may be one day after the other or a month after the other.

Governor DE CASTRO. No, sir; I meant separate bodies. For the island of St. Croix, we have to submit those bills to the Municipal Council of St. Croix. For the islands of St. Thomas and St. John,

we have to present tax bills, or any other bills, to the Municipal Councils of St. Thomas and St. John. So, we deal with 2 separate legislatures, meeting in 2 separate islands with divergent economies and 16 human beings in two separate legislatures.

Mr. DAVIS. In that connection, I know all you gentlemen have had experience with State governments and you know just how popular a tax increase is among the people of a State or Territory.

I want to pay a tribute to Governor de Castro for his wonderful battle to hold the revenue levels and to increase them wherever fair and equitable to do so, against a great deal of opposition—much of it completely unfair and illinformed—but still great opposition in the islands.

Mr. JENSEN. Well, so far as I am concerned, I have been well aware of Governor de Castro's intentions and purpose and I would be willing to leave the management of revenue raising and expenditures pretty much in the Governor's hands.

Governor DE CASTRO. I shall do my best as long as I am there, and as soon as I get the recommendations, I will go over them.

Mr. KIRWAN. When we were down there, we found out, if I am not mistaken, that Mr. Camady owns 8 percent of the island of St. Croix.

Mr. DAVIS. Approximately that.

Governor DE CASTRO. He has about 4,400 acres, as I recall, out of a total of 50,000 acres.

Mr. KIRWAN. He has 4,400 acres and he has thousands of cattle, has he not?

Mr. DAVIS. Yes, sir; he has a large herd of cattle.

Governor DE CASTRO. About 1,000.

Mr. KIRWAN. He has, I guess, sugarcane and everything else.

Do you have any idea of the amount of taxes he has paid down there in 1 year?

Governor DE CASTRO. On his local earnings only. You know the Federal income-tax law applies to the Virgin Islands, but continental Americans living there pay into the local treasury only the Federal income tax on their local investments. In other words, he would pay an income tax at St. Croix on what he makes on his estate there.

So far as I recall, and I do not have the figures before me, but he has not made any profit on sugar. That is the story I have heard. I do not think Mr. Camady has made any profit on his estate there and, of course, he does not pay to the islands and is not required to pay his income tax on his investments in the United States. That is paid into the Federal Treasury.

He pays a real-estate tax, which is 1¼ percent under the local law, which is low, and I have recommended to the legislature that that be increased to 2 percent and even 3 percent. However, he pays that on the actual value of his property. I do not know the value of his property, but whatever it is, he pays 1¼ percent.

Mr. KIRWAN. Why would he not make any money on sugar?

Governor DE CASTRO. I would like to ask Mr. Skeoch to answer that. He is handling the sugar operation in St. Croix.

LIMITED EXPORT OF SUGAR TO THE UNITED STATES

Mr. SKEOCH. Principally, because of the drought factor which we have been faced with over the years and which we are trying to do something about, and also due to our low sugar export quota which we have there. The Virgin Islands are not allowed to ship but a small portion of our production into the United States.

Mr. KIRWAN. That is the answer. On the one hand, we give them money to try to survive, and on the other hand, we will not let them survive.

Mr. SKEOCH. You give us such a low quota, we cannot raise the production of sugar without suffering additional losses.

Mr. KIRWAN. We destroyed their rum industry when we bought the islands. After they started coming to life again, we established a quota that they can ship only so many pounds or tons of sugar into the United States a year. On the other hand, we are making great strides to allow other countries to ship in here under the free trade agreement while we do not allow one of our own Territories to ship its production to us. I think there is something wrong along that line. We continue to send them money down there and then we do not want to let them make a few dollars by shipping to us, in order to be self-sustaining. I think the Virgin Islands are a part of America and I do not know why we do not let them ship more sugar up here.

SUGGESTIONS FOR INCREASING REVENUES

Mr. JENSEN. The General Accounting Office has made some suggestions as to how greater revenues could be collected in the Virgin Islands, and I shall ask that this statement go into the record, without objection.

(The matter referred to follows:)

GOVERNMENT OF THE VIRGIN ISLANDS

1. Hospitals

(*a*) Cost of operation in 1952, $492,000; less revenues, $18,000; deficit in 1952, $474,000.

(*b*) If 1938 rates were applied to 1952 services, collection would be $418,000.

(*c*) If 1938 rates were increased, collection would be $836,000.

2. Taxation

(*a*) Efficient tax administration and enforcement of collection in delinquent cases, the estimated revenues, based on Reeves report for 1951, would increase $200,000.

(*b*) An increase of real property assessments to 100 percent of valuation, instead of 50 percent, would increase revenues $100,000.

(*c*) An additional 20-percent tax levy on liquors sold at retail prices, based on Reeves' report for imports, would yield about $85,000.

(*d*) Enforcement of trade tax on imports, based on proper filing of manifest invoices, should increase present revenues about 25 percent, or $75,000.

(*e*) A complete audit of tax returns and followup on delinquent income taxes should increase revenue by $65,000.

(1) One taxpayer paid about 50 percent of the total income-tax revenue in St. Croix for 1951.

(2) One taxpayer, the largest property owner, paid no income tax at all. He showed a loss from farm operations of $62,000 which he included in United States returns.

(3) Eight of forty largest property holders have not filed 1951 returns.

3. Public works

(*a*) Segregate fire department from public works.[1]
(*b*) Need adequate equipment, training, and personnel.[1]
(*c*) Lack of planning on installation of sewer system which cost $305,000. No tie-ins provided in plans.
(*d*) Utilization and protection of property, (6 gasoline tanks and 1 diesel engine).[1]

4. Reduction of expenses

(*a*) Elimination of salaries for councilmen, $31,000. Case study—councilmen receive per diem, travel allowance, and salary plus expenses for meals.
(*b*) Centralization and control of procurement.[1]
(*a*) Centralization and control of payrolls (example, payment of annual leave on termination).[1]
(*d*) Realistic budget procedures by municipalities.[1]

Mr. JENSEN. I note 1 item in this General Accounting Office statement which says that 8 of the 40 largest property holders have not filed 1951 returns

That looks rather out of order.

Mr. DAVIS. Mr. Chairman, if I might make a suggestion there, I would be very glad to have this included in the record, but would it not be helpful if you would ask the Governor to include his comments on the statements made here so that the committee would have a little fuller information?

Governor DE CASTRO. I have not seen this.

Mr. DAVIS. We have not had the benefit of that recommendation.

Mr. JENSEN. All right, I shall submit the statement to you, Governor, and if you care to make some comments on it for the record, we would be glad to have such comments.

Governor DE CASTRO. May I study them and then send the statement in, because it would be rather quick to make a statement on something of this nature.

Mr. JENSEN. Yes, you do that.

(The matter referred to follows:)

MEMORANDUM PREPARED BY THE GOVERNOR OF THE VIRGIN ISLANDS IN REGARD TO QUESTIONS RAISED AT THE SUBCOMMITTEE ON APPROPRIATIONS OF THE HOUSE OF REPRESENTATIVES HEARINGS ON THE VIRGIN ISLANDS APPROPRIATION FOR THE FISCAL YEAR 1954

1. Hospitals:

(*a*) Cost of operation in 1952	$492,000
Less revenues	18,000
Deficit in 1952	474,000
(*b*) If 1938 rates were applied to 1952 services collection would be	418,000
(*c*) If 1938 rates were increased collection would be	836,000

Let me begin by stating that it is obviously impossible to collect either $418,000 or double that amount, namely, $836,000, from hospital fees in the Virgin Islands of the United States. There is a 116-bed hospital on the island of St. Thomas which includes 60 medical beds, 26 mental beds, and 30 TB beds. There is a 60-bed general hospital at Christiansted on the island of St. Croix. There is a 12-bed hospital and public health facility in the town of Frederiksted on the island of St. Croix. There is a 4-bed hospital and public health facility on the island of St. John. A summary of free medical care furnished at the Virgin Islands municipal hospitals, exclusive of care furnished TB patients, mental patients, and all patients, furnished care under the Federal health program, namely, venereal disease, maternal and child health, crippled children, etc., during the period July to Sep-

[1] Greater efficiency in operation should result.

tember 1952 in St. Croix and October to December 1952 in St. Thomas revealed the following figures:

	Total patients	Number of inpatients	Number of outpatients	Total value of care
St. Croix	874	402	472	$3,364.50
St. Thomas	188	87	101	2,735.50
Total	1,062	489	573	6,100.00

Before evaluating the possible income of a hospital from services to patients, it is necessary to take into account:

1. The various types of patients that are to be cared for;
2. The capacity of various economic groups in a community to pay for care and the amount that each group can pay;
3. The cost of providing the services that are rendered and the portion of the cost that various segments of the community would be able to pay;
4. The hospitals in the islands are providing physicians' services as a part of the overall hospital services.

If the new hospitals in the Virgin Islands, and particularly the hospital in St. Thomas, are to be used for the care of chronic tuberculosis and mental patients, the cost of caring for these chronic cases will be high and the potential of income to meet the more costly overhead of the hospitals will be considerably reduced. Tuberculous and mental patients now under care in the hospital come from the lowest income group and will not be able to pay anything for their care. Well-to-do families send their patients to other medical centers for whatever care is required. Tuberculous and mental patients represent about 50 percent of the patients.

It is believed that if the per diem cost of our hospitals for general patients were $10 for inclusive services and 10 days considered to be the usual period of hospitalization for a patient, only about 5 percent of the community could pay $10 per day. Another 5 percent could pay $5 per day. About 25 percent of the community could pay nothing for their care unless some agency were responsible for them. About 63 percent of the community could likely only pay $3 per day and nly 2 percent could pay as much as $15 per day for inclusive services in a private room.

2. Taxation

(*a*) Efficient tax administration and enforcement of collection in delinquent cases, the estimated revenues, based on Reeves report for 1951 would increase $200,000.

During the fiscal year 1952 the departments of the Government of the Virgin Islands connected with the enforcement of tax administration tightened all the procedures for enforcing the collections of taxes. The revenues of the two municipalities increased from $1,351,686 collected for the fiscal year 1951, to $1,556,043 collected during the fiscal year 1952, or an overall increase of $205,000.

At the end of the fiscal year 1952, the amount of delinquent cases was very much reduced over the past years. For example: In the municipality of St. Thomas and St. John, the only real property tax bills unpaid for all years amounted to less than $100. The income tax bills outstanding amounted to approximately $25,000 for all years. Of the $25,000 outstanding, at least $15,000 represented bills approved for installment payment. The outstanding bills for the import, or general and selective excise taxes, amounted to approximately $10,000 at the end of June 1952.

The Reeves report indicated that efficient tax administration and enforcement of collection for delinquent cases would increase revenues over 1951 by approximately $200,000. The above figures show that the total revenue raised from local sources was increased in 1952 by the amount indicated in the Reeves report. The small amount of outstanding bills at the end of June 1952 indicates definitely that much of the increased revenues for 1952 resulted from a more efficient tax administration and enforcement of collection in delinquent cases.

(*b*) An increase of real property assessments to 100 percent of valuation, instead of 50 percent, would increase revenues, $100,000.

For the calendar year 1951 there was a considerable increase in real property assessments in the municipality of St. Thomas and St. John. A similar plan for

reassessment will be taken up for the municipality of St. Croix possibly for the calendar year 1952. Recommendation has been made to the legislature for increase in the rate of real property taxation from 1.25 to 2 percent but this has not been approved by the legislature. It is believed that, in the main, real property assessments are now approximately 100 percent of valuation not considering inflationary prices which are paid by a number of continental Americans, coming to live in the islands, who are willing to pay anything for property regardless of its intrinsic value.

(*c*) An additional 20-percent tax levy on liquors sold at retail prices, based on Reeves' report for imports, would yield about $85,000.

It is not believed that additional 20-percent tax levy on liquors would be practicable. A great part of the liquor trade on the island of St. Thomas is export trade, that is, liquors imported into the Virgin Islands for sale to the tourist trade and for export to other West Indian islands. Exports cannot be taxed. The business people of the islands have repeatedly brought to the attention of the Governor that even the present tax levy on liquors operates to diminish the tourist trade. The islands must depend considerably on the tourist business. An additional levy would cause the merchants to seek refunds for all export and would result in diminishing returns, in the opinion of the Governor as well as the business people of the islands.

(*d*) Enforcement of trade tax on imports, based on proper filing of manifest invoices, should increase present revenues about 25 percent or $75,000.

During the fiscal year 1952 the tax assessor waged a strong campaign for compliance in the filing of invoices bu businesses. Collection of taxes on imports for the fiscal year 1952, for the Virgin Islands, increased by approximately $17,000 over the fiscal year 1951. During the fiscal year 1951, revenues from the trade tax on imports amounted to $349,837, as against $366,974 collected during the fiscal year 1952.

This campaign for greater compliance in the filing of invoices is being continued vigorously by the tax assessor, and the law has been amended to provide that in cases where the taxpayer is delinquent in filing invoices, the tax assessor shall make arbitrary assessments. This procedure has helped the tax assessor in getting greater compliance. For the 1953 fiscal year it is estimated that collections of revenues from trade taxes on imports, for the municipality of St. Thomas and St. John, will amount to approximately $300,000, which will be an increase of $85,000 over the collections of 1951 fiscal year.

By the end of June 30, 1953, it is estimated that the two municipalities will collect revenues from the taxes on imports in an amount which will exceed the 1951 revenues over and above the $75,000. The increase in the revenues must be largely credited to the enforcement procedures applied by the departments administering the tax.

(*e*) A complete audit of tax returns and followup on delinquent income taxes should increase revenue by $65,000.

Prior to the fiscal year 1952 the income-tax office did not possess the facilities and information for the enforcement procedures of income tax. However, with the help of the Baltimore and Washington offices, we were able to set up enforcement procedures during the fiscal year 1952. As a result, delinquencies in the municipality of St. Thomas and St. John, for example, were reduced to the point where we now estimate our outstanding delinquent cases to be about $7,000 for all years.

We have approximately $10,000 of other unpaid bills which are being paid on approved installment plan. As a result of a strong program, not only of the enforcement procedures of the income tax, but a program of investigating questionable returns, income-tax collections during the 1952 fiscal year, for the Virgin Islands, amounted to $645,453, as against the amount of $491,290 collected during the fiscal year 1951, or an increase of $154,163 in the collection of income taxes.

The Reeves report estimated that with complete audit of tax returns and followup on delinquent income taxes, the collections in 1952 fiscal year should increase by $65,000 over the collections of the fiscal year 1951.

The actual figures indicated above reflect the result of the vigorous work performed by the departments concerned in carrying out the income-tax laws, in addition to the favorable upward trend of business.

(Note: The details on item (*e*) 1, 2, and 3 have been supplied for the committee files.)

3. *Public works*

(*a*) Segregate fire department from public works.

The municipal government has not deemed it advisable to follow this recommendation. It would create additional overhead expenses. Nevertheless, a new fire bill has just been passed by the Municipal Council of St. Thomas and St. John and approved by the Governor, a copy of which is attached, and which will make for much better fire protection.

(*b*) Need adequate equipment, training, and personnel.

This is conceded.

(*c*) Lack of planning on installation of sewer system which cost $305,000. No tie-ins provided in plans.

At the time these sewers were designed (under Federal Works Agency), it was the intention, as is the usual practice in the design of sewer systems to build only the collecting and intercepting sewers (laterals and mains) and turn them over to the municipality as their responsibility to operate and maintain. The service connections (tie-ins referred to) were, as is the usual practice, considered to be the responsibility, financially and in timing, of the abutting property owner, he was to apply to the local public works department for permission to have his plumber connect his home or business establishment to the sewer main or lateral after receiving a permit or permission from the public works department. Most cities follow this pattern.

Although the sewers were completed several years ago it was not until September 13, 1952, that a local ordinance containing provisions to carry out the above idea was passed.

(*d*) Utilization and protection of property (6 gasoline tanks and 1 diesel engine).

Sufficient information is not given here to make any intelligent comment. Our public works department does own six steel tanks. Four of these horizontal cylindrical steel tanks were formerly used for underground storage of fuel oil. These tanks were dug up and removed when the housing project started at Long Bay. They were old railroad tank cars that were bought in Puerto Rico at a cost of $50 each. Two horizontal cylindrical steel tanks that were formerly net buoys were obtained from the Navy without cost and were part of the underground fuel storage system at Long Bay. All these tanks were dug up and removed to other storage when the housing project started in the area in which they were located underground. They are now held for further disposition in the appropriate manner.

Reduction of expenses

(*a*) Elimination of salaries for councilmen, $31,000. Case study: Councilmen receive per diem, travel allowance, and salary plus expenses for meals.

The only solution for this recommendation is a new organic act which has already been recommended. The executive branch of the government of the Virgin Islands may not properly interfere with the legislative branch. See statement attached.

(*b*) Centralization and control of procurement.

(*c*) Centralization and control of payrolls (example, payment of annual leave on termination).

(*d*) Realistic budget procedures by municipalities.

These are conceded. They are being prepared for us by the Systems Division of the General Accounting Office which will shortly come to the islands to institute these procedures.

BILL NO. 197

The Ninth Municipal Council of Saint Thomas and Saint John, 1953–1954

ORDINANCE To provide for the establishment and organization of a municipal fire service

Be it enacted by the Municipal Council of St. Thomas and St. John in session assembled:

SECTION 1 (a). There is hereby created and established, under the general supervision of the Superintendent of Public Works, a Municipal Fire Service, as a division of the Public Works Department, for the purpose of preventing and fighting fires on the island of St. Thomas The Municipal Fire Service shall be composed of a Fire Chief, Deputy Fire Chiefs, Inspectors, paid and volunteered Firemen, and such other officials and employees, paid and volunteered, as may be necessary for protection against the devastation of fires

(b) Volunteered members of the Municipal Fire Service shall receive no compensation but shall be covered by Municipal insurance

SEC. 2. The Fire Chief shall be responsible for the discipline, good order and proper conduct of the Fire Service, the enforcement of laws, ordinances and regulations pertaining thereto and for the care and condition of the hoses, hose carriages, engines and all other property of the Fire Service. The Governor shall appoint a paid full-time Fire Chief with the advice and consent of the Municipal Council who, under the general administration of the Superintendent of Public Works, shall be in active and immediate command of the Fire Service. All responsibility for the direction and control of the Fire Service shall rest in the Fire Chief.

SEC. 3. The Fire Chief or his representative shall have absolute control and command at all fires and fire alarms. Violations of his legitimate orders at the scene of a fire shall constitute a misdemeanor and shall be punishable upon conviction by a fine not to exceed fifty ($50) dollars or by imprisonment not to exceed thirty (30) days or both such fine and imprisonment.

SEC. 4. The Fire Chief shall—

(a) Prepare and issue, subject to approval of the Governor, such rules and regulations as may be necessary for prevention of fires in all places including but not confined to homes, public buildings, hotels, churches, places of public assembly, theatres, schools, hospitals, industrial and commercial establishments, docks, warehouses, etc. These rules and regulations, after being approved and promulgated by the Governor and published, shall have the force and effect of law. The violation of any provision of the rules and regulations established by the Fire Chief and approved and promulgated by the Governor shall be punishable by a fine of not less than five ($5) dollars, not more than one hundred ($100) dollars, or by imprisonment in jail for a term of not more than ninety (90) days, or by both fine and imprisonment.

(b) Prepare and issue, subject to the approval of the Governor, such rules and regulations as are necessary for the organization and operation of the Fire Service.

(c) Determine the qualification for enlistment and recruiting of volunteer firemen and other volunteer members of the Fire Service.

(c) Keep a record of all fires, including statistics as to the extent of such fires and the damage caused thereby and whether such losses were covered by insurance, and if so, to what extent. Such records shall be made daily from the reports made by the deputy fire chiefs or other personnel. All such reports shall be public.

(e) To make and transmit to the Governor an annual report containing a resume of all the activities carried on by the Service during the year, with such statistics as may be necessary to include therein. The report should also recommend such amendments to the rules and regulations promulgated by the Governor as, in the judgment of the Fire Chief, may be desirable.

(f) Institute a training program and through personal inspections keep informed of the progress and efficiency of the Fire Service.

(g) Receive, with the approval of the Governor, donations in money, real and/or personal property from the Federal Government or from any public or private entity, whether in trust or in ownership, or in any other form; provided, that in the case of money or any other financial assistance, the funds received shall be covered into the Treasury of the Municipality of St. Thomas and St. John in a Special fund to be known as the Fire Service Fund.

SEC. 5. All members of the Municipal Fire Service shall perform such duties as may be required by the Fire Chief. Members of the Service shall have the power to prevent all persons not belonging to the Service, or not Acting under proper authority, from entering any fire station or handling any fire apparatus belonging to the Service. Every member of the Service shall be furnished with a copy of the rules and regulations prescribed by the Fire Chief.

SEC. 6. It shall be the duty of the Fire Chief to cause to be inspected as often as may be necessary, but not less than twice a year in outlying districts, and not less than four times a year within the city limits, and not less than six times a year within closely built sections of the city, all buildings, premises and public places, for the purpose of ascertaining and causing to be corrected any condition liable to cause fire, or to obtain information relative to the violation of the ordinances of the Municipality affecting fire hazards.

SEC. 7. Whenever any officer or member of the Municipal Fire Service, or any agency or instrumentality of the Government, acting under the authority of the Fire Chief, shall find in any building, public or private, or upon any premises, public or private, any combustible or explosive matter or substances, or any dangerous accumulation of rubbish, or needless and unnecessary accumulation of

waste, waste paper, boxes, shavings, or any other inflammable material or materials calculated or liable to engender or promote a fire, and which is so situated with reference to the buildings, premises or places as to endanger life or property or shall find obstructions to or on fire escapes, stairs, passageways, doors, or windows, tending to interfere with the operations of the Municipal Fire Service, or the egress of occupants in case of fire, or shall find evidence of the violation of existing ordinances pertaining to fire hazard, or to the prevention of fire, he shall forthwith order the same to be removed, remedied or corrected. Such order shall be forthwith complied with and obeyed by the owner or occupant of such building, premises or other place.

SEC. 8. Within twenty-four hours after an order to remove, remedy or correct a fire hazard has been served, as provided herein, the owner or occupant may appeal from such order to the Building Board of Appeals which is hereby vested with jurisdiction to determine such appeals whose decision shall be final. Any owner or occupant failing to comply with such order within five days after the service of said order or within five days after the appeal shall have been determined, shall be liable to punishment for a misdemeanor. Orders issued by representatives of the Fire Service shall be in writing and service shall be made upon the occupant of the premises by delivering a true copy thereof to such occupant personally, or by delivering the same to or leaving it with any person over the age of 14 years, in charge of the premises, and in case no such person is found in the premises, a copy of such notice shall be affixed, posted or tacked in a conspicuous place on said building or premises, and service of a copy of said order, if there be no person in charge of the premises to whom said order could be delivered, shall also be made upon the owner thereof by delivering to him or his representative a true copy of said order.

SEC. 9. The right of way of the streets, alleys and other public places is hereby given to the trucks, fire engines and vehicles of the Municipal Fire Service in all cases when in line of duty. Failure to yield said right of way shall constitute a misdemeanor and punishable as such upon conviction.

SEC. 10. The Fire Chief, or any assistant in command, may prescribe limits in the vicinity of any fire within which no person, excepting those who reside therein, firemen and policemen, and members of the medical service on duty, and those admitted by order of the Fire Service, shall be entitled to enter and it shall be the duty of the Police Department to enforce such orders. Violations thereof shall constitute a misdemeanor and shall be punishable as such upon conviction.

SEC. 11. No person shall be entitled to take away any property in the possession of the Fire Service saved from any fire until he shall make satisfactory proof of ownership thereof. The Fire Chief or any of his assistants in command shall have power to cause the removal of any property, whenever it shall become necessary for the preservation of such property from fire, or to prevent the spreading of fire, or to protect adjoining property.

SEC. 12. When a fire is in progress the Superintendent of Public Works and the fire chief jointly shall have the power to order any building or buildings that are in close proximity to such fire torn down, blown up, or otherwise demolished, for the sole purpose of checking the conflagration, but this authority shall not be exercised unnecessarily or recklessly.

SEC. 13. The Fire Chief shall have the authority to issue rules and regulations governing protection of fire apparatus, prevention of fires, fire drills in schools, public buildings and other places where such drills may be necessary, the issuance of permits for bonfires, the operation of volunteered fire squads, and for the institution of a trainnng program for the members of the service. Such rules and regulations shall have the force and effect of law when approved and promulgated by the Governor.

SEC. 14. Any member of the Fire Service, in the performance of his duty in carrying out fire prevention work, shall have access to all places mentioned in section 4, as well as full power and authority to inspect such places or any part thereof for the purpose of securing information on, or making investigation regarding the safety of persons or property from fire. Any owner, manager, or representative who refuses to allow entrance to the places enumerated in this ordinance, or who otherwise interferes with any member of the Fire Service authorized to make inspections and investigations hindering the entrance of such member to any of such places, shall be guilty of a misdemeanor and, upon conviction, shall be punished by a fine of not less than five ($5) dollars nor more than one hundred ($100) dollars, or by imprisonment in jail for a term of not more than ninety (90) days or by both fine and imprisonment.

SEC. 15. Any person who shall violate any of the provisions of this Ordinance or any rule issued hereunder shall be deemed to be guilty of a misdemeanor and punishable upon conviction in accordance with penalties prescribed in this Ordinance.

SEC. 16. All laws or parts of laws in conflict herewith are hereby repealed.

SEC. 17. This Act shall take effect thirty (30) days after its approval.

Thus passed by the Municipal Council of St. Thomas and St. John on January 29, 1953.

Witness our Hands and the Seal of the Municipal Council of St. Thomas and St. John this 29th day of January, A. D., 1953.

JOSEPH A. GOMEZ, *Chairman.*
EARLE B. OTTLEY, *Secretary.*

The above Ordinance is hereby sanctioned and approved.

Witness my hand and the Seal of the Government of the Virgin Islands of the United States at Charlotte Amalie, St. Thomas, V. I., this second day of March, A. D. 1953.

[SEAL] MORRIS F. de CASTRO, *Governor.*

GUAM

Mr. JENSEN. The next item, is Guam. Is there anyone here to speak on this?

Mr. DAVIS. We do not have a direct representative from the Governor of Guam. It is only a simple item, Mr. Chairman, and I think I can take care of that.

Mr. JENSEN. I notice there is a $4,364 increase requested in the 1954 budget over and above 1953. Can you explain that increase?

Mr. DAVIS. The proposed increase is distributed among several requirements for incidental expenses in connection with the operation of the Governor's office, Mr. Chairman. It does not represent any increase in salaries or operating expenses, except in this way.

Six hundred and fifty dollars is for transportation of supplies and property, because of the increased freight charges and based on actual experience in that operation.

One hundred dollars is for postage and communication services; an increase of $1,250 is for printing and reproduction of the Governor's report, particularly, and acts and resolutions of the Guam Legislature.

It is necessary from time to time to call in experts from the mainland to advise on utilities and other matters that are within the responsibility of the Governor and Governor's office. This item of $5,218, which is an increase of $4,364 over the previous estimate, is to cover such requirements as those.

There is an increase of $2,000 on purchase of supplies and materials, and that estimate is based on actual experience during the previous year.

LEGISLATORS ON EXECUTIVE DEPARTMENT PAYROLL

Mr. JENSEN. During the hearings on the 1953 budget, you gave us the number of elected Guam legislators on the executive department's payroll at that time. How many were there then and how many are there now?

Mr. DAVIS. The legislature is composed of 21 members, none of whom are now on the Federal payroll. It is illegal under the laws of Guam now for any government employee, whomever he is, to be a member of the legislature. Any Territorial employee is barred from assuming legislative office in the Territory, if he continues to hold any other position under the government of Guam.

GUAM'S POWER SUPPLY

Mr. JENSEN. The Governor of Guam has undertaken construction of a million dollar power plant and Electric Bond and Share did the power study and reportedly found an adequate supply of power on the Island of Guam.

What is the story behind that? I have a memo here which says that the Governor of Guam recently employed the Electric Bond & Share Co. as consultants on the power study on the island. The report on the study did not recommend the installation of additional power facilities. The legislature, however, appropriated approximately $1 million for construction of a powerplant. The bill was signed by the Governor. Electric Bond & Share are engineers for the job, and advertisement for bids has been made. There would normally be no review of the island government's legislation by the Secretary prior to its approval by the Governor. The organic act gives the Governor veto power, including authority to veto individual items in appropriation bills. A veto can be overridden by the legislature, which puts the legislation up to the President of the United States for action. If he does not veto in 90 days, it becomes law.

What do you know about that, Mr. Davis?

Mr. DAVIS. If the chairman prefers, I shall be glad to submit a more detailed memorandum, covering the entire history of that power-situation item.

Mr. JENSEN. Tell us very briefly about it.

Mr. DAVIS. It grows out of the fact that all power on Guam is supplied by the Navy, and in the agreement which transferred the civilian administration to the Interior Department it was contemplated that the Navy would continue to supply a sufficient amount of power for civilian use. The civilian economy of the island is completely dependent upon the naval power station and naval supply for power. The civilian economy is growing very rapidly in its use of power and has a very urgent demand for increased power. There are stores and homes now that can get no power, although they have a complete installation for use of lights and for other power.

The Navy, up to this point, has been unable to make any firm commitment as to the amount of additional power which they could make available, even with the addition of the facilities that they have under construction, or have planned there.

We have urged the Governor of Guam—former Governor Skinner and now acting Governor Herman—to defer any further action on the bill appropriating money for the construction of additional power-generating facilities until a more thorough and careful study can be made and, perhaps, the new Governor has taken up his post.

At the present time, Mr. Edward Eardley, of our Division of Power for Interior, is on his way to Guam, and the reason for the trip is to make a further very careful study of the civilian power requirements, of the power actually now available and the necessity for increased power, and with the intention, if possible, to get an adequate assurance from the Navy that they will supply the additional power requirements. If not, the government of Guam will further consider whether it should go ahead on the construction of its own plant, because of the urgent need for additional power.

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I would be glad to supplement that with a more detailed memorandum, if you prefer.

Mr. JENSEN. All right, do that.

Mr. DAVIS. For the record, the contract for the new plant is not being awarded, and a very careful study is being made of the situation.

(The statement referred to is as follows:)

STATEMENT REGARDING POWER PRODUCTION FOR CIVILIAN USE ON GUAM

Under a Navy-Interior agreement concluded in 1950, the Navy agreed to continue providing power on Guam in then existing amounts—i. e., approximately 2,000 kilowatts (converted to 4,500 kilovolt-amperes). It also agreed to meet increasing civilian power needs to the extent that its facilities permit and actually has granted 2,000 additional kilovolt-amperes of interruptible power. The 1950 agreement stated that the Navy may expand its powerplant as necessary to meet increasing civilian needs if the Government of Guam provides capitalization.

A study by EBASCO Services, Inc., in 1952 concluded that present Navy facilities were sufficient to take care of then existing civilian needs and recommended against establishment of a local government powerplant. The study did not appraise future civilian needs, nor did it take account of the Navy's plans for expansion of its plant or requirements.

Despite repeated requests by the Interior Department and Governor Skinner, the Navy has consistently refused to state positively that it will produce the power needed for civilian use and that it will expand its plant if capitalization is provided by the Territorial government. In fact, a check for $1 million voted by the Guam Legislature for powerplant expansion was rejected in May 1952 by COMMARIANAS. Within 6 months after the government of Guam's offer of capitalization was rejected, the supply of power available for civilian connections apparently was exhausted. Requests by the Governor of Guam for additional allocations were denied by COMMARIANAS in November and December, and the Governor was advised that no additional allotment could be anticipated until completion in 1954 of a steam generator presently under construction. Meanwhile, in December 1952, the Secretary of the Navy ordered a study of military power needs on Guam over the next 5 years and suggested that a similar study be made of civilian power needs. With the assistance of Mr. E. P. Eardley, chief engineer, Division of Water and Power, whose services were made available by Secretary McKay, the government of Guam is now conducting a survey of future civilian power requirements. The study of future military requirements is under the direction of COMMARIANAS, who is stationed on Guam.

The Secretary of the Navy, in a letter to the Secretary of the Interior dated January 9, 1953, expressed the opinion that studies of the future civilian and military requirements for power would show that with the completion in 1954 of the 11,500-kilowatt steam generating unit in the Navy plant "the reasonably foreseeable needs of the military and civilian population of the island of Guam can be met." In effect, the Secretary of the Navy stated that he thought the expanded Navy plant would be capable of producing sufficient power to meet future civilian needs on Guam, though he failed to make any commitment in this regard.

The Governor recently reported to the Interior Department that there are civilian homes and businesses already wired which could take 1,000 kilovolt-amperes of power not now available for lack of allocation and that an additional requirement of 4,000 kilovolt-amperes will be needed by the end of this year. Under the pressure of this local demand for power, the Governor issued an invitation for bids for construction of a civilian powerplant. This action was understandable in view of the desire of the local government to be assured of adequate power and would be justified if studies show that the Navy plant with its planned expansion cannot with reasonable assurance fulfill civilian needs and the Navy remains unwilling to accept responsibility for further expansion of its facilities as necessary, even with the local government providing capitalization. However, since a single power-producing agency would be more economical for all concerned on Guam, we are determined to exhaust every possibility of getting the Navy to accept responsibility for producing the power required by all consumers on Guam. Accordingly, the Secretary of the Interior has requested the Acting Governor of Guam to withhold further action on bids for the local plant pending conclusion of the above-mentioned studies and of negotiations with the Navy on the basis thereof.

EXTENT OF DEPARTMENTAL SUPERVISION OF ISLAND AFFAIRS

Mr. JENSEN. To what extent does your Office of Territories review Guam government activities?

Is any control exercised at all over acts of the Governor in his administration of the executive branch and his actions on bills passed by the legislature?

Mr. DAVIS. Under the Organic Act, the Governor and Legislature of Guam have substantially complete legislative and executive authority.

Mr. SADY. The Interior Department, under the Organic Act, has responsibility for supervising the relations between the government of Guam and the Federal Government and the executive authority of the Governor is exercised under the supervision of the Secretary of the Interior.

In the normal legislative processes in Guam, the Department has not undertaken to review legislation as it is passed by the legislature to provide the basis for the Governor's actions, i. e., whether he should approve it or disapprove it. However, where there is any matter of Federal interest, such as in the development of an economic policy for the territory of Guam, or in the case of the power situation where the interests of another Federal agency are involved, the Department assumes a very direct interest. Also, in matters pertaining to relations with other countries, or our relations with the Congress, the Governor is required to deal through the Department. As a practical matter, I think it would be very difficult for the Department to undertake to advise the Governor how he should act on every bill that is passed by the legislature.

Mr. DAVIS. I would say our policy for a long time in dealing with the organized territories, that is, those that have an organic act and the legislature, has been to give them the largest practical mesaure of self-government. The governor is appointed by the President and confirmed by the Senate and the statutes themselves are his guide in carrying out the functions of his office. The Department does have authority for general administrative supervision, as Mr. Sady said, and we would certainly interfere in any case that came to our attention where the governor seemed to be exceeding his authority or taking manifestly unwise steps. We would normally do that, not by way of an order, but by way of an inquiry or suggestion to him that he give the matter further study and consult with the Department, or do something of that kind to confirm his judgment. There, also, is the overriding authority of Congress in this connection, to set aside any act of the Guam Legislature or to legislate for them, if it sees fit to do so. There is the further safeguard that a veto of the governor, which is overriden by the legislature, can be referred to the President for final action and the President's action is final. He can either sustain the governor, or decline to sustain the governor, in which case the action of the legislature stands.

What I wanted to point out is that you have the double safeguard there of the governor acting through the Secretary of Interior, and his veto, his right to appeal the overriding of a veto to the Congress. The Congress has the inherent power to legislate for the Territory directly, if it sees fit to do so.

Mr. JENSEN. Mr. Davis, are you satisfied with the way the government of Guam has been carried on under the Skinner regime?

Mr. DAVIS. I think that is a very difficult question to answer, Mr. Chairman. Naturally, in this transitional period when Governor Skinner was for the first time acting with a territorial legislature with full legislative authority, there were many problems of policy of the administrative type and other types that were carried over from the former days of the naval administration. I think it was inevitable that many situations would arise where there might be difficulties. I think Governor Skinner has been, throughout his administration, thoroughly alert and alive to what he conceived to be the needs of the island or its civilian economy. Governor Skinner has been vigorous, alert, and aggressive in defense of the principles that he thinks are proper. So, I can readily understand why there might have arisen various degrees of friction with the naval officials, or in some cases, with citizens on the island, but on the whole, I think we may be very proud of the administration of the civilian government during those first 2 years.

As you may know, Governor Skinner received the Distinguished Service Medal of the Department a few months ago, and that was awarded after very careful review of his actions there and the evaluation was made in the light of his overall responsibilities. The Legislature of Guam also commended him highly. He, of course, eliminated himself from the picture and at the present time the Government Secretary, Mr. Herman, is Acting Governor. We are awaiting the appointment of a new Governor.

Mr. JENSEN. Well, I could say plenty about that matter, but I think I shall hold that until some future time.

AMERICAN SAMOA

Mr. JENSEN. The next item is "American Samoa."

Mr. DAVIS. We have Mr. Draney, the Government Secretary, who has been in actual operating charge for much of the last few months and I should like him to present that item.

Mr. JENSEN. Mr. Draney, we are glad to have you here.

Mr. DRANEY. I am glad to be here, sir.

Mr. JENSEN. It is quite a long distance from your homeland, is it not?

Mr. DRANEY. Yes, it is.

Mr. JENSEN. How far?

Mr. DRANEY. I would say about 8,000 miles.

Mr. JENSEN. I went with two other Members of Congress to the South Pacific islands a year or so ago and I am sorry we could not get to Samoa at the time.

Mr. Draney, I presume you have a statement.

GENERAL STATEMENT

Mr. DRANEY. I do and I would like to read it, or at least part of the statement.

Mr. JENSEN. We will receive it for the record.

(The matter referred to follows:)

The government of American Samoa is requesting the Congress to appropriate a total of $1,650,000 for governmental operations in 1954, of which $116,000 is for the expenses of the Governor's Office, Judiciary, and the legislature which have been traditionally considered as direct Federal responsibilities; $1,105,000 is to supplement local revenues in order to provide education, health and other regular territorial services; and $429,000 is for emergency construction and equipment replacement.

The request of $1,534,000 as a grant represents an increase of $244,000 over the 1953 appropriation of which $165,000 is for departmental expenses and $79,000 for construction and replacement. The increases requested fall generally into two categories both of which are basic to good government and to the development of a self-supporting economy in American Samoa. First, there has been a rise in costs for personal services primarily as a result of the adoption of a classification and compensation plan worked out by a private management firm. This plan was requested to meet mounting dissatisfaction arising from the complex and inequitable wage system which had previously existed in Samoa. For example, unskilled laborers were receiving more than teachers and nurses, whose salaries were as low as $30 per month. The plan that has been adopted is operating well. It has remedied injustices and thereby helped improve morale among the Samoan Government workers. We feel that this is a vital prerequisite for the effective execution of all our programs.

The principal increase in functional activities is for health services. In this connection I should like to quote briefly from the report of a survey in Samoa made by Dr. Haldeman, Director of the Division of State Services of the United States Public Health Service.

"Almost all the working hours of the few physicians in the hospital must be now given over to the care of the sick and the injured immediately at hand. Too little, if any, time is left for them to plan and coordinate their work in preventing illness and death * * * funds well spent now will pay dividends over the next decade."

* * * * * * *

"Although the hospital contains 228 beds and 27 bassinets, it should not be rated at more than 170-bed capacity. The hospital is badly overcrowded. Hallways are lined with beds, as is the solarium. Acute cases of contagious diseases, such as whooping cough, pneumonia and influenza, measles, and diphtheria cannot be properly separated. The pediatrics ward is particularly crowded, and the facilities for tuberculosis, Hansen's disease, and mental illnesses are thoroughly inadequate. Proper segregation of tuberculosis patients is impossible to attain. The practice of retaining tuberculosis patients until quiescence taxes the space, but proper home care in the usual Samoan dwelling cannot be depended upon. About one-fourth of all hospital patients were cases of pulmonary tuberculosis at the time of survey, and their average length of stay was estimated at about 450 days. Thus the problem is exceptionally severe in this one aspect alone.

"The health department has barely enough resources to find and treat those who are already ill; it has few resources left over to institute a concomitant program of prevention, of health education, of basic control. This is poor public-health practice and certainly uneconomical on a long-term basis. It is an unavoidable practice in American Samoa, however, until adequate facilities, personnel, and funds are provided to take care of immediate health problems at the same time that long-range control measures are set in motion."

In the second place, we are asking for funds to complete a construction program which is already underway with funds allocated for 1953. This again is basic to any progress which we hope to make toward the goal of a self-supporting economy. Rehabilitation of the dock must be completed so that oceangoing ships can again dock and unload safely. The local Matson Line agent advised the Governor that the company will be unable to bring its ships into Pago Pago unless the dock is rehabilitated. Many pieces of automotive and heavy equipment must be replaced to eliminate the present uneconomic expenditure on maintenance. The increased attention being given to agricultural development is partly reflected in our request for funds to construct new facilities and to improve pasture lands. We have in mind doubling our dairy herd and thereby helping to meet the great need for fresh milk. Finally, in order to meet minimum health standards, we must improve the dispensary facilities in outlying villages and arrange for care of leprous patients within the territory to avoid their banishment to distant Fiji. A local leprosarium is important not only for humanitarian reasons but would also encourage persons afflicted with disease to present them-

selves for treatment. Again quoting from Dr. Haldeman's report, "The annex for housing cases of mental disease and Hansen's disease is totally unsatisfactory. The building is at ground level with cement floors throughout, which are pitted and difficult to keep clean. * * *" Just before the survey, one young Samoan girl in the early stages of Hansen's disease had to be returned to her village because there was no place to hospitalize her.

The funds requested for 1954 would enable us to provide only minimum services which the Territorial Government should render. The great emphasis in our governmental program, since the transfer of American Samoa to the Department of the Interior, has been economic advancement directed toward a self-supporting territory. Programs aimed at increasing copra production and developing a fishing industry are already underway. Other projects, such as water-supply improvement, introduction of new commercial crops, and development of timber resources, are in initial stages of investigation. These programs should produce concrete and lasting benefits to the Territorial economy and in due course lessen the degree of financial support required from the Federal Government.

Mr. JENSEN. That concludes your prepared statement?

Mr. DRANEY. Yes, sir.

SUMMARY JUSTIFICATION DATA

Mr. JENSEN. Without objection, we will place pages 24 and 26 of the justifications in the record.

(The matter referred to follows:)

Analysis of expenditures, by objective class—actual fiscal year 1952; estimated fiscal years 1953 and 1954

GENERAL FUND (GRANTS AND LOCAL REVENUES)

Class	Objects	Total		
		1952	1953	1954
01	Personal services	$840,009	$973,081	$1,045,707
02	Travel	30,767	75,786	53,625
03	Transportation of things	4,789	40,465	36,600
04	Communications	133	2,000	2,550
05	Rents and utility services	925	11,000	12,900
06	Printing and reproduction	3,323	4,035	7,065
07	Other contractual services	9,870	10,000	10,000
08	Supplies and materials	402,059	267,155	265,823
09	Equipment	27,757	45,845	68,280
11	Grants	1,077		
14	Interest			450
16	Investments and loans	3,618	2,500	2,000
	Total	1,324,327	1,431,867	1,505,000
	Less receipts	761,223	491,867	400,000
	Grant funds	563,104	940,000	1,105,000
	Add construction program:			
	Catchment basin		20,000	
	Nurse's quarters		80,000	
	Reconstruction of dock		250,000	150,000
	Automotive and heavy equipment			120,000
	Agricultural buildings			19,000
	Dispensary buildings			100,000
	Leprosarium			40,000
			350,000	429,000
	Total grants	563,104	1,290,000	1,534,000

Analysis of expenditures, by objective class—actual fiscal year 1952; estimated fiscal years 1953 and 1954—Continued

GENERAL FUND (GRANTS AND LOCAL REVENUES)

Class	Objects	Administration			Agriculture			Education			Public health		
		1952	1953	1954	1952	1953	1954	1952	1953	1954	1952	1953	1954
01	Personal services	$150,312	$162,833	$175,245	$31,310	$41,751	$42,865	$223,503	$235,479	$252,574	$154,919	$226,133	$248,718
02	Travel	29,228	72,886	15,340	24	150	5,150	582	750	12,410	885	1,500	10,696
03	Transportation of things	4,789	40,465	4,000			4,730			11,366			7,687
04	Communications	133	1,775	1,500		50	50			150			200
05	Rents and utility services	462	500	1,000	336	500	1,900						
06	Printing and reproduction	2,405	1,760	2,965	64	100	200	128	250	2,000	620	750	850
07	Other contractual services	5,854	4,650	4,000							3,649		
08	Supplies and materials	54,842	29,380	30,000	8,515	9,000	14,205	10,652	11,450	15,000	135,943	93,425	96,849
09	Equipment	2,848	4,555	43,500	88	315	5,900	2,696	2,750	6,500	21,777	15,725	10,000
11	Grants	1,077											
14	Interest			450									
16	Investments and loans	3,618	2,500	2,000									
	Total	255,568	321,304	280,000	40,337	51,866	75,000	237,561	250,679	300,000	317,793	337,533	375,000

Class	Objects	Justice [1]			Public works			Samoan officials			Other [2]
		1952	1953	1954	1952	1953	1954	1952	1953	1954	1952
01	Personal services	$42,218	$62,411	$64,981	$213,647	$227,674	$243,024	$13,204	$16,800	$18,300	$10,895
02	Travel	49	500	2,140			7,564			325	
03	Transportation of things			1,860			6,957				
04	Communications		175	500			150				
05	Rents and utility services				126	10,000	10,000				
06	Printing and reproduction	78	350	350	11	750	500	17	75	200	
07	Other contratual services					5,000	5,500	376	350	500	
08	Supplies and materials	10,247	9,575	7,989	181,843	114,250	101,305		75	475	7
09	Equipment	34	1,500	2,180		21,000		314		200	
11	Grants										
14	Interest										
16	Investments and loans										
	Total	52,626	74,511	80,000	395,627	378,674	375,000	13,911	17,300	20,000	10,902

[1] Consists of Office of Attorney General and former Public Safety Department.

[2] Expenditures which should have been reimbursed from appropriated funds:

Governor's office	$5,983
Judicial	4,549
Legislative	370
	10,902

Summary

Class	Objects	Governor's office	Grants		Legislature	Chief justice and high court	Total estimate
			Administration and operation	Construction			
01	Personal services	$42,634	$1,045,707		$18,650	$26,000	$1,132,991
02	Travel	6,716	53,625		4,000	3,650	67,991
03	Transportation of things	500	36,600		600	250	37,950
04	Communications	750	2,550		100	70	3,470
05	Rents and utilities		12,900			150	13,050
06	Printing and reproduction	3,000	7,065		300	150	10,515
07	Other contractual services		10,000			1,050	11,050
08	Supplies and materials	2,800	265,823		600	400	269,623
09	Equipment		68,280		2,750	880	71,910
10	Lands and structures			429,000			429,000
14	Interest		450				450
16	Investments and loans		2,000				2,000
	Total	56,400	1,505,000	429,000	27,000	32,600	2,050,000
	Less estimated local income		400,000				400,000
	Total		1,105,000				1,650,000

ORGANIC LEGISLATION

Mr. JENSEN. The organic legislation that exists for Samoa is stated on page 17 of the justifications. It is not much of a guide for this territory. What is being done about getting adequate organic legislation?

Mr. DRANEY. Mr. Chairman, very recently we reorganized our legislature out there. We reduced the number of our legislators and we now have 18 members in the house and 15 members of the senate, and I understand, basing my statement on a radio dispatch which we received very recently, that organic legislation is now up for consideration.

Mr. JENSEN. What is the population of American Samoa?

Mr. DRANEY. Around 19,000.

Mr. JENSEN. And you have how many house members and how many senators?

Mr. DRANEY. We have 15 members of the senate and 18 house members.

Mr. JENSEN. How are they paid?

Mr. DRANEY. At a rate of about $180 a year.

Mr. JENSEN. How often do they meet?

Mr. DRANEY. Ordinarily, they will meet in a special session in June and again in a regular session in November. This past year, due to the election, we postponed the regular meeting until February. The FONO opened up on February 2.

Mr. DAVIS. If you will permit me, I would like to explain a little more fully about the organic legislation.

The legislation for Samoa was originally introduced at the same time the organic legislation for Guam was introduced, and that was 3 years ago. The legislation was separated, because at that time it appeared to be advisable to proceed with the Guam legislation and some questions arose as to the Samoan legislation after a visit of a subcommittee of the House Committee on Interior and Insular Affairs to that island. The organic legislation for American Samoa has been in draft form ever since that time and is being studied at the

present time. I believe it is not actually pending at the moment; is that correct?

Mr. SADY. The subcommittee of the House Interior and Insular Affairs requested that the views of the FONO be obtained in regard to this draft legislation so that they could be considered by the committee in connection with the draft which had been submitted.

Mr. DAVIS. It is our intention to restudy that question and submit a new draft of the organic act just as quickly as that information can be obtained during the present session of Congress.

In the meantime the present governmental structure is being handled by Executive order. As you know, that is under authority delegated by the Secretary of Interior and by the President and the present statutes and laws of the island, including the powers of the legislative body, are those prescribed by order of the Governor with the approval of the Secretary of Interior. It is not, as we have often pointed out, a satisfactory situation, but it is all we have to work with at the moment.

Mr. JENSEN. You anticipate, then, that organic legislation will be passed by the Samoan Legislature at this session?

Mr. DRANEY. Yes, sir.

Mr. DAVIS. That would be limited to considering the provisions of the proposed bill and making recommendations, of course, to the Congress, which would be taken up here in the legislative committee.

INCREASED WAGES

Mr. JENSEN. I note that the increase which you are asking for in this budget is due primarily to increased salaries for employees of the island.

Will you tell us something about that?

Mr. DRANEY. About a year and a half ago the Department of Interior contracted with Research Associates, Inc., of Honolulu, to make a thorough survey of the wage situation there. This was done, and as a result, we adopted last April the new wage scale and classification system. It served to eliminate a good many inequities, and while the salaries still are low, compared to stateside standards it did, as I have already mentioned, eliminate much of the difficulty we had had prior to that time.

CONSTRUCTION

Mr. JENSEN. On pages 43 and 44, I note the construction item totals $429,000. I think last year we gave you $250,000.

Mr. DRANEY. Yes, sir.

Mr. JENSEN. That was for repair of docks, was it not?

Mr. DRANEY. The main dock.

Mr. JENSEN. Now, what are you going to use this money for that you are requesting this year?

Mr. DRANEY. To complete the construction; it is primarily for materials.

Mr. JENSEN. To complete the construction of the main dock?

Mr. DRANEY. That is right.

Mr. JENSEN. Will this amount do that, or are you going to come back again next year and ask for more money?

Mr. DRANEY. Based on estimates recently given us by the Board of Harbors Commissioners in Honolulu, the total of $400,000 is not going to be too far out of line; this covers the $250,000 received for fiscal year 1953 and the $150,000 we are asking for in 1954.

THE HOME GUARD

Mr. JENSEN. Has an enlistment facility been established in American Samoa?

Mr. DRANEY. No, sir. However, the newly appointed Governor, Governor Judd, has already taken action to get some assistance from the National Guard.

Mr. JENSEN. Yes, I understand that. In fact, I had lunch with the new Governor a few days ago and was favorably impressed with the Governor. He is a man of long experience and he said he was going down there with the full intention of doing the thing that is absolutely best for the people of Samoa and for the nation generally, and I believe he meant every word of that.

You used to have a guard on the island. What was the name of that guard?

Mr. DRANEY. The Fita Fita Guard.

Mr. JENSEN. The people there took great pride in that guard, did they not?

Mr. DRANEY. They certainly did.

Mr. JENSEN. For some reason it was abolished and discontinued. Just why was that done?

Mr. DRANEY. When the Navy moved out in 1951, there were no means left to maintain the guard.

Mr. JENSEN. That guard, more or less, took the place of the National Guard or Home Guard, did it not?

Mr. DRANEY. Yes, Home Guard.

PROBLEMS CREATED WHEN THE NAVY MOVED OUT

Mr. JENSEN. When you lost the guard, you also lost the airplane-landing field. Was that not moved to another island some 700 miles away?

Mr. DRANEY. The airfield has received very little use since the Navy left there.

Mr. JENSEN. Where are the planes now landing that used to land on Samoa?

Mr. DRANEY. Commercial planes land in Western Samoa, about 90 miles distant. There are no Navy planes now visiting our Territory.

Mr. JENSEN. You have a landing field there suitable for most any kind of plane to land on?

Mr. DRANEY. It will take right now in its present condition up to planes of the DC–4 class. The DC–6 class cannot use the field because of the short distance between the end of the propellers and the surface of the field. It needs a bituminous coating; it is a coral strip at present.

Mr. DAVIS. Much of our difficulties, Mr. Chairman, have arisen from the fact that the Navy was the backbone of the economy of the island. It contained a big navy yard, and there are several hundred employees plus the Fita Fita Guard. There are also complete

logistical service there, both air and surface. All that was cut off overnight when we took the islands over from the Navy, and we have been left to find some way of substituting for the income and the activities that were withdrawn by the Navy. The problem is by no means easy and it is by no means solved, but I think we have made very substantial progress and the people have adjusted themselves, on the whole, very well. There has been a rather heavy migration of the young Samoans to other areas, and there would be a bigger migration if the transportation were available.

There is much that needs to be done with the economy—the improvement of cacao production and the introduction of better production methods—but we are still face to face with that gap in the economy caused by the withdrawal of the Navy.

IMPORT QUOTAS

Mr. KIRWAN. Now, suppose you had developed this cacao business and chocolate production and that some other part of the United States economy would be affected. They would not let you admit it into this country.

Mr. DAVIS. At the present time, products on American Samoa are admitted into the States duty free.

Mr. KIRWAN. Yes, and because they are not conflicting with any of our production.

Mr. DAVIS. Yes.

Mr. KIRWAN. And they are admitted duty free because you are not raising much of it. That is why it is free.

Mr. DAVIS. It would require an amendment to the tariff act to exclude products.

Mr. KIRWAN. I am going to ask you this question: Do you know of any place in the world where they would do what the Congress did here about 3 years ago when the Congress set aside money to be spent in the Virgin Islands to build a big sugarplant and equip it so they could process their production? After they spent that money, last year, the islands had a sugar production of 12,000 tons of sugar, and they would only allow 6,000 tons to come into the United States. They allowed 3,000 to come in from Cuba, and Cuba does not belong to the United States, but we have to appropriate money to Puerto Rico and the Virgin Islands and they will not let their products come into this country.

Do you know of any place in the world where they would do that?

After we develop Samoa and make it possible for them to raise consirable cacao beans, and that production comes into competition with someone, we will probably put a barrier up so you could not ship it into this country.

Mr. DAVIS. When the Sugar Act was revised in the last Congress, the quota was doubled, but it still is not, as the chairman says, enough to permit full production of sugar in the Virgin Islands.

Mr. KIRWAN. 12,000 tons can come in, but they can raise 25,000 tons there.

Mr. DAVIS. Possibly.

Mr. SKEOCH. I would think they could raise 25,000 tons.

Mr. KIRWAN. That is what I say. They can raise 25,000 tons.

Mr. DAVIS. That would make possible the operation of the sugar-plant on a profitable basis and the cultivation of the land for the production of sugar.

Mr. KIRWAN. A lot of money was spent to install a new mill, and now we will not let you sell the sugar. I do not know of any place in the world where they would do that.

Mr. DAVIS. The Sugar Act is a special kind of legislation, as you gentlemen know.

FISH CANNERY

Mr. JENSEN. How is the fish cannery coming along that the government of Samoa took over?

Mr. DRANEY. We still have it on a standby basis. We have two maintenance men who are there constantly, and each piece of machinery is turned over at least once a week; it is kept in very good condition.

Mr. JENSEN. What was the cost of that cannery to Mr. Rockefeller, or the foundation?

Mr. DAVIS. I think it was not the Rockefeller Foundation, but one of the private firms in which Mr. Lawrence Rockefeller participated, and we understood the original investment in the operation was around $1,200,000. The Government acquired the canning equipment for $40,000. Recently, there has been a growth of interest in the possibility of operating it. The Government advertised in the fishery trade journals a few months ago for proposals to lease it, with the idea of getting it in operation for some employment, and there were at least two proposals from important firms, accompanied by good-sized certified checks to guarantee good faith. There also has been since that time 2 or 3 other firms that desire to be considered. The proposals were not in good enough form to permit immediate acceptance, and there will have to be some negotiations, but we are hopeful it can be put in operation in the near future.

GENERAL ADMINISTRATION

Mr. JENSEN. Now, "General administration," that is your office, is it not, Mr. Davis?

Mr. DAVIS. Yes, sir; that is correct.

Mr. JENSEN. You are asking for an increase of $36,118 over fiscal year, 1953?

Mr. DAVIS. That is right.

Mr. JENSEN. At this point, I would like to place the table on page 52 of the justifications in the record.

(The matter referred to is as follows:)

7. General administration

Subactivity	Adjusted appropriation	Decreases	Base, 1954	Estimate, 1954	Increases
Personal services	$262,082		$262,082	$276,502	$14,420
Travel	19,800		19,800	21,498	1,698
Communication services	3,000		3,000	3,000	
Printing and reproduction	10,000		10,000	10,000	
Other contractual services	2,500		2,500	22,500	20,000
Supplies and materials	5,000		5,000	5,000	
Equipment	1,000		1,000	1,000	
Taxes and assessments	700		700	700	
Total	304,082		304,082	340,200	36,118

Mr. JENSEN. Will you, Mr. Davis, explain your reasons for wanting this increase?

PERSONAL SERVICES

Mr. DAVIS. Well, the first part of the increase, $14,420 for personal services, is intended to permit us to round out the staff of our Pacific Division, which has all of the general broad responsibilities for all of these areas that we have discussed here, and would permit the addition of a couple of people who could be used in general work, both in the Department and in the field.

The present difficulties are that the key people who are handling these assignments in the area are spread so thinly that if one of them has to be away on a trip, or if there is a vacancy for a time, the work of the office suffers. I think we can do a much better job if we had just a little more help on the personnel side.

I know the committee will recall I have often advocated dealing with the territories with a lean type of staff with a few people of ability covering the field, rather than a large number of people, spread over many different compartments. I do feel, it would be helpful to us if we could have some addition in that area. The stenographic position, of course, is necessary to keep up with the paper work involved from the others.

TRAVEL

We are asking a small increase in travel of $1,698. Obviously, travel is one of our worst problems, because of the very great distances involved. It costs us something like $3,000 to make a complete trip to the Territories and return for one visit. Mr. Sady, for example, Chief of the Division, in visiting the principal centers in the trust territory and to American Samoa and back to Washington, would cost close to $3,000. We feel we must try to maintain some sort of personal contact with these people and operations, or else we cannot handle them properly in Washington, or advise you and the other committees properly about what needs to be done.

So, we have asked for a small increase there.

SPECIAL SURVEYS

We have asked for an increase of $20,000 to be made available for carrying out special surveys, as required. The committee certainly would want us to keep up with the economic possibilities in the Territories. It might want us to study trends in population in the Territories, or to study the educational system, or study any of these areas where we are required to supply policies and to set up the machinery for handling the problems in the area. We should proceed on the basis of skilled observation and judgment, rather than on the basis of someone else's opinion and ideas.

I think the administrative studies and surveys that have been made in the past have been of invaluable assistance to us in getting as far along as we have with the development of good government in these areas. We should like to have the possibility of doing that, where required. They would be surveys by competent people, usually dawn from other Governmen' departments, and occasionally drawn from the outside, in such fields as health, education, and land

management. Mr. Eardley is one of the most competent experts in this country on power operations. He is now going to Guam and to the trust territory, to advise us and, of course, advise you on what the actual requirements are there.

Mr. JENSEN. Who did you say was going?

Mr. DAVIS. Mr. Edward Eardley, Assistant to the Chief of the Power Division of the Interior Department, and a very able power engineer. His report might very well save the Government a million dollars in planning for the facilities that would be needed in that area. It is the sort of thing that is very much needed.

Mr. JENSEN. How often is it necessary to send a man from Washington to those areas that you have just spoken of that costs $3,000 per trip?

Mr. DAVIS. In actual practice, I would say that we have from our own staff financed, perhaps, the equivalent of 2 trips a year; 1 trip by by the Chief of the Pacific Division and 1 by the executive officer and such trips are based largely on a matter of judgment and of developments in the area, but I would think the minimum ought to be 2 trips by people on the staff in the course of the year to these areas, but we also have these other cases.

Mr. SADY. I might mention that the United States Public Health official, Dr. Haldeman, who made the study of health conditions at Samoa and went on to Guam and the trust territory, was financed out of, for the most part, Office of Territory funds, and it was through his recommendations that we were able in the Department to assess budgetary needs for health work as reported to us by the territorial governments. Rather than employing a health specialist in the Office of Territories, we draw upon the talent in the United States Public Health Service to make those medical health studies for us.

Mr. DAVIS. The committee will recall that our responsibility with regard to American Samoa and the trust territory is quite different from those in regard to the other territories. We have a direct responsibility here for the operation of those governments that requires a closer degree of knowledge and supervision than would be true in the case of the other territories.

AMERICAN SAMOA

ORGANIC LEGISLATION

Mr. NORRELL. There is no organic law regarding American Samoa?

Mr. DAVIS. No, sir.

Mr. NORRELL. Has there been any attempt to get any kind of a law through?

Mr. DAVIS. Yes; it has been proposed again and again that an organic act for American Samoa be enacted. I think Senator Bingham, 20 years ago when he made a study, drafted and introduced an organic act for Guam, which I recall passed the Senate for American Samoa.

Mr. NORRELL. Nothing has been done about that yet?

Mr. DAVIS. No, sir. We have ourselves introduced the bill twice in two Congresses, but as I explained a few moments ago, they have failed of passage.

Mr. NORRELL. But you do have a legislature on American Samoa?

Mr. DAVIS. We have the body called the FONO, which is in the form of a legislature, but which does not have legislative authority.

ACCOUNTING AND FINANCIAL CONTROL

Mr. NORRELL. We had quite an argument last year regarding the money collected, assessments, taxes, and expenses.

Mr. DAVIS. That is right.

Mr. NORRELL. Has there been anything done regarding that at all since last year?

Mr. DAVIS. Those revenues are still collected, just as they were and are incorporated with the Federal grant in the administration of the Territory.

Mr. NORRELL. Just as they were?

Mr. DAVIS. Yes, sir; just as they were.

Mr. NORRELL. Do they plan to do anything about that, or is it satisfactory to them as it stands now?

Mr. DAVIS. Well, it is not immediately clear to me, Mr. Norrell, how you could improve the situation, as long as the Federal Government is responsible for major public services. It could be separated, possibly, but it would be very difficult.

Mr. NORRELL. Under the existing situation, if I should go down there and collect a lot of money in various ways that they have now of collecting money and put the money in my pocket and keep it, would you not be concerned about that?

Mr. DAVIS. Certainly; but the Territorial government has the same safeguards in the collection and use of revenues that it has in the use of Federal funds; the same bookkeeping and the other safeguards; it could not be done.

Mr. NORRELL. When has there been a study made of the money that they have paid in in various ways?

Mr. SADY. I might mention, the General Accounting Office is coming in, I understand, possibly in July to give us a check.

Mr. NORRELL. Do you make it every year?

Mr. SADY. This will be the first one.

Mr. DAVIS. This is the first audit by the General Accounting Office, but the chief fiscal officer of the Territorial government is supposed to keep his accounts, subject to the Comptroller General.

Mr. NORRELL. I would like you to elaborate on that and give me a breakdown as to who audits this money and who tells them where the money is going to be expended and where that authority is.

I have been to Samoa and, in fact, I think I am an honorary member of one of the tribes down there, and I would like to know what is done in this regard.

Mr. DAVIS. You would like a memo, showing the fiscal controls and how the local revenues are allocated?

Mr. NORRELL. Yes. I have been greatly concerned about that. It may be all right, and I am not making any charges.

(The material referred to follows:)

STATEMENT REGARDING ACCOUNTING AND FINANCIAL CONTROLS OF THE GOVERNMENT OF AMERICAN SAMOA

With the joint participation of the Department of the Interior, the General Accounting Office, and the government of American Samoa, an accounting system

was developed and an accounting manual prepared and placed in effect on July 1, 1952. A copy of the accounting manual has been sent to the chairman of this subcommittee. The accounting system was formally approved by the Comptroller General of the United States on July 17, 1952.

The system incorporates currently accepted accounting principles, with particular emphasis on independent internal controls. It also complies fully with the requirements of Budget-Treasury Regulation No. 1 of the Federal Government. The department of administrative services of the Territorial government is responsible for administering internal financial controls. All cash payments to the government are normally made directly to the customs and revenue division. Cash collections by other departments are deposited daily with the customs and revenue division, which in turn deposits all receipts from all sources daily to the government account in the Bank of American Samoa. All disbursements by the Territorial government are made by check by the accounts division on the basis of audited, approved vouchers. The accuracy of all detailed accounts, such as accounts receivable, inventories, and accounts payable, is verified regularly and every effort being made to give full effect to the procedures set forth in the manual.

The Department of the Interior and the Government of American Samoa requested almost a year ago that regular annual audits be made by the United States General Accounting Office of the accounts of the Territorial government. It is understood that the first such audit will be undertaken by the General Accounting Office shorting after the close of the current fiscal year, i. e., the first year of operation under the new accounting system.

The establishment of this accounting system, covering all receipts and expenditures of the Territorial government and the annual audit thereof, provides for the first time in almost 50 years of United States jurisdiction over American Samoa a complete and accurate record of financial transactions for the territorial government and lays a firm foundation for good government in the territory.

SALARIES OF GOVERNMENT OFFICERS

Mr. NORRELL. Who fixes the salaries that we are paying on Samoa? For instance, the salary of the Governor and the chief justice and the other officers down there?

Mr. DAVIS. The salaries of the Governor and the Government's secretary and the chief justice, I believe, are fixed under the Classification Act, by the Interior Department, with the approval of the Civil Service Commission and they are Federal payroll officials.

The salaries of the employees of the government of Samoa, that is, the Territorial employees, as contrasted with the Federal employees, are fixed by the Governor of Samoa.

Mr. NORRELL. Who fixes the salary of the Governor of Samoa?

Mr. DAVIS. The Secretary of the Interior, with the approval of the Civil Service Commission; it is a classified job.

Mr. NORRELL. How does he determine what the salary should be?

Mr. DAVIS. Well, on the basis of general responsibilities and in comparison with other similar classifications. Actually, it is fixed well below the standard set by the Congress in the Executive Pay Act.

Mr. NORRELL. I notice on page 20 that the salary of the Governor is indicated as $12,000, and then a 25 percent cost-of-living allowance, in addition to that. This $7,462, I assume that would be paid to the secretary and other members of the Governor's staff?

Mr. DAVIS. The differential is not paid to the Governor.

Mr. NORRELL. What is the total salary of the Governor of American Samoa?

Mr. DAVIS. $12,000.

Mr. NORRELL. That is the total salary?

Mr. DAVIS. Yes; that is all he gets.

Mr. NORRELL. He gets a differential, does he not?

Mr. DAVIS. No, sir; he does not get it.

Mr. NORRELL. This 25 percent differential would not apply in his case?

Mr. DAVIS. No, sir. The other two or three classified employees would get the differential, but the Civil Service Commission recently disapproved paying the differential to the Governor.

Mr. NORRELL. I want to congratulate them on that.

I think the governors of these islands ought not to, for instance, exceed the amount that the governors make of the average State in the Union. It would not be quite right for the American Government to pay the governor of one of these islands more money than the average in the States.

REPLACEMENT EQUIPMENT

I notice on page 24 of the justifications that among other things under the public-works program of $375,000, you are desirous of building a building to house the automotive and heavy equipment on American Samoa to the tune of $120,000.

Mr. DAVIS. No, sir; that is for replacement of equipment. It is not for housing.

Mr. NORRELL. That is not for housing, but it is for the equipment itself?

Mr. DRANEY. Yes, sir.

Mr. NORRELL. What kind of equipment is that?

Mr. DRANEY. Trucks and bulldozers, roadscrapers and equipment of the sort used in the public-works operations of the island. I might say that the equipment now is the Navy equipment, which was in a very bad state of deterioration when they turned it over to us, and it has almost reached the point where it cannot be used. It averages about 10 years in age.

PUERTO RICO RECONSTRUCTION ADMINISTRATION

Mr. JENSEN. Mr. Davis, the General Accounting Office has made some suggestions regarding the Puerto Rico Reconstruction Administration, and I am going to hand them to you. You can look them over and make such comment as you care to, which will be inserted in the record at this point.

Mr. DAVIS. Yes, sir. I will be very glad to do that.

(The matter referred to follows:)

PUERTO RICO RECONSTRUCTION ADMINISTRATION

1. Liquidate PRRA assets of 15 million include 3 million cash. Turn over to other Government agencies and/or insular government. Loss, $500,000 per year.
2. Pitts recommended liquidation in 1947 which was also supported by the Hoover Commission.
3. Cut expenses immediately. From $762,000 in 1952 and $463,000 proposed in 1954 to $194,000 in 1954.
4. $1.46 is spent in direct costs to collect $1 in rural areas. Adding administrative expenses brings the cost up to $1.90.
5. Cost of repairs to houses often approach the selling price. Then selling price is collected over 20–25 years at cost of $1.90 for each $1 collected.
6. Agency does not know value of its assets.

1. Not shown on balance sheet:
   (*a*) Eleanor Roosevelt estimated value over $400,000.
   (*b*) Materials and supplies amount unknown.
2. Not reconciled:
   (*a*) Notes receivable at $4,600,000.
   (*b*) Equipment.

Reply to Questions of General Accounting Office

Before answering the questions in the order given it is thought desirable to give a brief outline of the aims and purposes of the Puerto Rico Reconstruction Administration and to appreciate and understand the work, it is necessary to go back to 1934 and visualize fundamental problems of the island of Puerto Rico at that time.

These were tendencies or trends of the economic, social, and political character, shown vividly by the island's constant increasing population, the concentration of the best lands into fewer and fewer hands, the disappearance of the independent farmers, the increasing homelessness of thousands of citizens, the overcrowded slum areas, rise of contagious diseases, increase of unemployment and social unrest. In addition, these factors were aggravated by the world wide depression, the loss of markets, alterations of trade conditions, new sources of competition, legal restrictions on an important international commodity like sugar and an inevitable stirring throughout the world in the field of human relationships.

Thus, the main purpose of the PRRA was to carry out a comprehensive program, which would not only take care of the immediate problems by affording widespread employment but would tend mainly toward a fundamental correction of the economic and social evils besetting the island and its people.

As a result, the PRRA placed as its objective the simple but all encompassing goal of a satisfactory standard of living. To accomplish this, the PRRA embarked on a twofold program of rural rehabilitation; the acquiring of lands to establish new homesteaders or resettlers on 1 to 3 acres of land; the development of new crops to supplement the sugar, coffee, and tobacco crops, the establishment of central service farms to guide and supervise the resettlers, as well as furnishing recreational centers and medical dispensaries, together with schools administered by the insular government; and the purchase of sugar lands and mills, the lands being subdivided into farms varying in size from 10 to 140 acres, and sold to individual sugarcane farmers, with the mills sold on a long-term basis to the new landowners after they had organized cooperatives for their operation.

Besides the rural rehabilitation work many constructive programs were initiated, such as the construction of school buildings, both primary and secondary units, as well as completing the building program of the University of Puerto Rico; the increasing of vocational education by building 38 modern school unit rural schools, all of which have been turned over to the insular department of education; repairs to various schools; health program work; housing and slum clearance; cattle-tick eradication; soil conservation; reforestation; hydroelectric developments; construction of a cement manufacturing plant; the establishment of cooperatives; the construction of various Federal and insular buildings; aid to municipalities; social service and athletic; the training of needlework and embroidery workers; and many other miscellaneous projects.

From this one should understand that the building of homes, both urban and rural, with the rural houses having a small acreage to enable the resettlers to grow food crops for their own consumption and to increase their income by the sale of the surplus, had the main idea of improving their living conditions. As these houses were for the underprivileged classes, who ordinarily would have had no opportunity of living in and purchasing a small home with land, they were given a low rental rate of from $1.50 to $3 per month for rural houses and $6.45 to $22.50 for urban houses and apartments. After occupancy for a stated time an opportunity to purchase was given, a subsidy of from 30 to 55 percent was granted, with monthly installment payments for the sale price to extend over a period of 20 to 25 years. This program was not designed for the purpose of having the costs of construction returned without loss to the Government but was purely a relief and social-betterment program designed to give the underprivileged classes, both in the urban and rural districts, an opportunity they had never had before to purchase homes at a low monthly rate so their very limited income would be sufficient to meet the payments and thus earn for themselves the dignity, well being, and higher living standards that follows the accomplishment of the ownership of one's own home and land.

1. Liquidate PRRA assets of $15 million include $3 million cash—Turn over to other Government agencies and/or insular government—Loss, $500,000 per year

As of December 31, 1952, PRRA had assets of $14,529,462 including $3,313,927 cash. While liquidation is at present proceeding in an orderly manner at actually no cost but at a savings, as evidenced by the project applications submitted for the fiscal year 1954 of $463,000, which is $237,000 less than the estimated income for the same year, with succeeding years expenditures and savings in proportion to the liquidation accomplished, any transfer of activities to other Federal agencies would require congressional and legal action, as well as the appropriation of the necessary funds needed to accomplish the additional work transferred to the agency or agencies. Or, if all assets and responsibilities are transferred to the insular government then the Federal Government would lose control over the entire assets and the continued performance of the original purposes and aims the Administration instigated, as well as the yearly savings that would accrue to the revolving fund over and above what the costs of liquidation would be if the liquidation was continued by the PRRA.

In brief, if the PRRA was liquidated in its entirety by one stroke of the pen the Federal Government itself would not gain but would lose. It would lose the savings that will be effected each succeeding year between the higher estimated collections and the lower yearly expenditures. In addition, the Government would no longer have control or be in a position to administer to the end the original purposes for which the Administration was set up. It is desired to state here that the PRRA should not be considered merely as a "collection" agency. Under the terms of its housing programs and deeds of sale it is responsible for the determination of the qualification of the proposed resettlers, the approving of transfers on sales to subsequent purchasers, the approval of any changes or alterations to the property, the deciding whether the property can be put to use for any other purpose than originally determined, the upkeep and maintenance of its federally owned property and other incidental problems that continually arise.

(*b*) In answer to the statement showing a loss of $500,000 per year, there is shown below the following:

For the fiscal year 1952 the total collections deposited to the Puerto Rico revolving fund amounted to $937,682, while $195,986 was deposited to the credit of miscellaneous receipts. The authorized expenditures for the same year were $771,100. This shows a gain of $166,582 to the revolving fund. If it had been possible to credit the amount of $195,986 to the revolving fund instead of to miscellaneous receipts, the total income would have been $1,133,668, which would then had given a gain of $362,568 over the amount authorized for expenditures that year, namely, $771,100.

For the current fiscal year of 1953, $776,600 has been authorized for expenditures with the estimated collections approximating $700,000. This would give an estimated $76,600 loss to the revolving fund, unless the actual collections exceeded the estimate, which is entirely possible.

For the fiscal year 1954 it is estimated that the income would amount to $700,000, as compared to the proposed expenditures of $463,000, which would give a gain of $237,000 to the revolving fund.

Thus, instead of a $500,000 loss and by using the total amount authorized for expenditures from the revolving fund, namely, $771,100, the Puerto Rico revolving fund gained $166,582 during the fiscal year 1952; and for the fiscal year 1953 the revolving fund would possibly lose an estimated $76,600 or less, while for the fiscal year 1954 the revolving fund will gain an estimated $237,000. The total gain for the 3 years would be approximately $327,000.

2. Pitts recommended liquidation in 1947 which was also supported by the Hoover Commission

Liquidation is progressing under the Pitts' plan in an orderly manner. However, the full Pitts' plan was not placed in effect as the Federal agencies recommended in the plan to take over certain of the PRRA activities could not or were not willing to do so. Further, the insular government was not interested in taking over the PRRA, it did not have any departments or bureaus that were engaged in activities that could satisfactorily absorb the active PRRA projects.

3. Cut expenses immediately—From $762,000 in 1952 and $463,000 proposed in 1954 to $194,000 in 1954

The sum of $776,600 was authorized for the fiscal year 1953. A reduction of $313,600 was administratively proposed in May 1952 and followed when the project applications for the fiscal year 1954 were prepared in the amount of $463,000.

This represents a reduction in permanent personnel from 151 to 94, or 57, together with an appreciable reduction in temporary casual hourly workers.

Since the beginning of PRRA up to and including February 28, 1953, there has been expended a total of $81,011,804, representing $34,666,799 from the special fund, the income from which fund is deposited to and makes the Puerto Rican revolving fund, $35,075,045 from yearly funds, and $11,269,960 from the revolving fund itself. The income from both the yearly funds and the Puerto Rican revolving fund are deposited to miscellaneous receipts. Therefore, until such time as the various and necessary activities, together with the accompanying assets, are turned over to other Federal agencies for operation and/or in entirety to the insular government, it is necessary for the Administration in its organized capacity to protect the Government's interests in assets totaling $14,529,462 as of December 31, 1952, as well as the people of Puerto Rico for whom the benefits of the various programs were instigated, by fully and thoroughly performing all the various acts incident to the protection, upkeep, collection of all rental, sales and loan payments and the preservation of property, such as lands, buildings, houses, roads, etc. To do this a minimum force of 94 permanent employees at headquarters and throughout the island is required—57 such employees are being dropped effective as of June 30, 1953.

There are still 6,688 parcels with houses and 3,142 parcels without houses scattered all over the island for which collections of rentals and sales have to be made. Of this number, approximately 1,500 rural parcels and parcels without houses are still being occupied under the lease-purchase contracts and/or vacated as the case may be. These resettlers, for reasons of their own, are not as yet willing to convert to ownership under the deed-mortgage plan. Naturally, these properties have to be continually looked after and repaired from time to time as a protection of Government property.

Further, it is thought not amiss to state here that from past experience if any Federal agency would be willing to and would be given the proper authority to take over a definite part of the PRRA's activities the agency would also ask and require additional funds for such work. This would probably amount to more than is and will be spent by the PRRA from its own funds. Actually the operation of the PRRA is without cost to the Government as no appropriations from Congress are needed or requested. All operating funds are from its own income and as the presently contemplated expenditures for the fiscal year 1954, as well as subsequent years, will be less than the estimated yearly incomes, nothing of value or importance would be gained by abruptly disposing of PRRA, either partially or entirely, to other Federal agencies or the insular government. By so doing the revolving fund would no doubt be discontinued and the Government would lose the income in the revolving fund over and above the amount expended in the orderly liquidation of the PRRA, as well as losing control over the activities and assets of the agency.

With the PRRA continuing its liquidation in an orderly way from its own funds, the island and the Federal Government would have an agency set up and available with a fund of at least $3,000,000 to immediately act with the necessary relief and relief work that might be authorized by Congress or the President in the event of disaster caused by a hurricane or other causes.

4. $1.46 is spent in direct costs to collect $1 in rural areas. Adding administrative expenses brings the cost up to $1.90

Not having the figures on which the determination was made that $1.46 expended in direct cost to $1 in rural areas and adding administrative expenses brings the cost up to $1.90, actual comment on those particular figures may not be given. However, the Administration, in preparing the estimates for the fiscal year 1954, found by using the total salaries and expenses of the employees engaged as collectors in the field, as well as the employees engaged in the tabulation of such work in the headquarters office, that the estimated cost of collecting in the rural areas was $0.77 for each dollar collected. Therefore, an administrative change in the manner of collection for the fiscal year 1954 was worked out, which resulted in the reduction of the estimated costs of collection from $0.77 to $0.39 for rural and $0.05 for urban for each dollar collected.

5. Cost of repairs to houses often approach the selling price. Then selling price is collected over 20–25 years at cost of $1.90 for each $1 collected

(*a*) The various rural houses built by the PRRA have been located in groups of approximately 5 to 20 scattered throughout the island, many on mountainsides that are beyond regular roads. Houses were built of galvanized iron, rammed

earth, clay and cement, wood and cement at prices averaging from $650 to $1,235 each.

Prior to the sale of the houses to the resettler tenant all repairs had to be made by the Government in accordance with the lease contract. In some cases to get the resettler to purchase the property under deed-mortgage plan (which was a part of the liquidation program under the Pitt's plan) it was necessary to agree to make the repairs the houses needed at that time. Most of these houses had been occupied for an average of 10 years for which the tenant has paid his regular monthly rental which was credited to the sale price. Thus, when a subsidy of 30 to 55 percent was given according to the kind and location of the house, it might appear that the sale price after the subsidy and prior rental payments were credited that the final amount due for the sale might only be a little in excess of the cost of the repairs that had been made. However, this very important fact should be taken into consideration. The PRRA housing projects were not intended to be a profit-making project but were for the sole purpose of giving the underprivileged classes with very low yearly incomes an opportunity to better their living and economic conditions by obtaining a livable home, as compared to their former 1- or 2-room houses built of wood and corrugated iron scraps with thatched roofs, and a small piece of ground to grow edible crops to better feed their families and augment their incomes by the sale of the surplus.

During the year 1950–51, 265 rural and 142 urban houses were repaired at an average cost of $194.05, while during the year 1951–52 356 rural and 31 urban houses were repaired at an average cost of $206.62.

(*b*) Regarding the statement that then the selling price is collected over 20–25 years at a cost of $1.90 for each $1 collected it is again not understood how that figure was determined. For the fiscal year 1954 it is estimated that the collecting cost will not exceed $0.39 for rural and $0.05 urban for each dollar collected. At the same time it is believed that a further considerable savings in collection costs could be effected, and the liquidation materially expedited, if authority was given to offer a cash-sale, settlement-in-full plan on the basis of a 20 or 50 percent cash payment of the sale price and/or balances due according to location of houses and/or parcels without houses. Such a plan would do away with the necessity of collecting and keeping a record of the installment payments over a 10- to 25-year period.

6. Agency does not know value of its assets

1. Not shown on balance sheet
   (*a*) Eleanor Roosevelt estimated value over $400,000
   (*b*) Materials and supplies amount unknown

(*a*) This is misleading and wrong impression given as a result of the GAO representatives insisting on having a unit cost for each house built by the PRRA, which would have been possible if this Agency was working on a profit-and-loss basis or as a commercial enterprise. PRRA projects were worked or contracted by groups composing various units, and on that basis an estimate was made to determine the selling price of each unit. After the determination was made, a subsidy was given to the resettlers in rural areas as an incentive for them to acquire the parcels. In urban housing projects the subsidy was only given after the first 5 years of occupancy, and at the time of total cash payment of the balance due. If the purchaser continued to pay on the installment plan for the life of the contract no subsidy was given.

Other assets as lands which were bought at a fixed price but were then divided into sugar lands, marginal lands, and grazing lands, the estimated value of each parcel sold was credited to the original cost, as the exact cost of each parcel sold could not possibly be determined and credited to the fixed property account. This account has and is being adjusted from time to time in accordance with the estimated value of the property still unsold but in no way could it be determined that a profit or loss is being made when an individual parcel of land or a dwelling unit is sold.

The estimated value of our assets are known, and as such they are shown in the balance sheet. The fact that for economic reasons no cost-accounting system is kept to determine unit prices or that the primary objective of this organization was for relief and rehabilitation purposes rather than for profit, does not mean that the value of assets is not kept as a control account in the general ledger.

It is a fact that it would appear that an understatement of assets is shown for the Eleanor Roosevelt development as a result of the profits derived from the sales of its lots and houses. But, as explained and shown to the GAO representatives, our fixed assets account included as a total amount the housing projects balances, which comprised four urban projects and the resettlement farms. How-

ever, the reverse side of the prepared balance sheets always showed an estimated breakdown of these four urban projects and resettlement farms. The other housing projects not having the location and value of the Eleanor Roosevelt development have granted high subsidies in the sale of houses and parcels which will effect a loss to the housing projects in total even after the crediting of the Eleanor Roosevelt individual profit.

It is an accepted accounting principle that no profit or loss should be taken in the accounting records until a final liquidation is made of all the fixed property account. Periodic adjustments will be made to take care of subsidies or grants made on an estimated value, but only after a total liquidation and conversion of fixed property into notes receivable or cash sale is made, can this housing project account be finally adjusted.

(*b*) The materials and supplies amounts not being shown is perfectly understandable when you take into consideration that such items are generally bought in small quantities by and for a definite project use. If not used immediately but require storage for a short time they are stored in a project storehouse at the site of or at the headquarters of the project. The individual project storehouse is definitely not in the same category as a general warehouse wherein various items are stored for more than one project or purpose and have to be withdrawn on a definite order and the proper appropriation or account charged for the costs.

Generally speaking, materials and supplies for the small projects that comprise this Administration are purchased by and distributed for immediate use with the original cost being charged to the project at the time of purchase. As far as it is known it is not the general practice to keep records of materials and supplies used in the prosecution of projects, either administrative or field. Such materials and supplies are not comparable to equipment for which property records are kept.

2. Not reconciled:

(*a*) Notes receivable at $4,600,000.

(*b*) Equipment.

(*a*) This account, amounting to $4,600,000 comprises the total of about 8,000 accounts kept in the Office of Housing Management and which due to the decentralized system and the lack of personnel, it has been impossible to make periodic reconciliation of outstanding balances. Also the Office of Housing Management had a different accounting system to that of the Finance Division.

The Finance Division, whose books have only controlling accounts made entries for the total value of the notes receivable signed by the purchasers while the Office of Housing Management debited only quarterly collection bill registers which were prepared for installments due. Its records showed only due balances instead of total balances owed by purchasers. Actually they are now changing the system so that their records can be reconciled with Finance records.

Nevertheless, it was emphasized to the GAO representatives that while the outstanding balances had not been reconciled for the reasons mentioned above, all collections against this account has been reconciled since the beginning of the liquidation program and the sale of houses and lots started.

(b) It is true that the equipment account does not show the current value, after depreciation, largely for the reason that when the operating funds of the PRRA were drastically curtailed beginning with 1942 it was necessary to discontinue many of the original objectives. In many cases various agencies of the insular government continued the completion of started projects or started similar new projects following the aims and purposes originated by the PRRA. Thus, it was the policy then to loan equipment that had been used for such purposes but was no longer of use or value to the PRRA due to reduced funds to the said agencies without charge.

Due to the time that has elapsed since the original loans, it is believed that most of the equipment is of no particular value. However, steps are being taken to clear these accounts by either selling the still usable items at a reduced price or survey them from the records.

A recent inventory has been taken of equipment on hand and the records will be amended to show the proper value. Therefore, it is contemplated that the books will show a correct equipment valuation before the fiscal year is over.

Over the course of years the Administration has faithfully and well carried out the aims and purposes of its various projects and programs for the betterment of the living standards and economic conditions of the people of Puerto Rico, with the policies being in line with and generally conforming with the policies of the insular government. In following this program and beginning with 1943 the Federal Government has been put to no additional cost as all expenditures have been and are being made from the Puerto Rico revolving fund, which fund

as of December 31, 1952, had a cash balance of $3,313,927. Further, it is fully believed that the Federal Government would not gain in any way by the immediate liquidation of the PRRA through disposal in part to other Federal agencies or in entirety to the insular government. With the PRRA continuing its own liquidation in an orderly manner and consistent with the purposes and intent of the rules and regulations under which it was set up, the Federal Government would be at no expense, but instead the revolving fund would continue to have a yearly savings over collections (beginning with an estimated $237,000 for the fiscal year 1954) in completing the liquidation. Thus, at final liquidation there would be a balance of $4 to $5 million in the revolving fund that could be transferred to the Treasury of the United States as a credit to Miscellaneous Receipts.

Trust Territory of the Pacific Islands

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate (obligations incurred)			$8,500,000
Comparative transfer from "Administration of Territories, Office of Territories"	$4,267,584	$5,223,750	
Total obligations	4,267,584	5,223,750	8,500,000

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
1. High Commissioner's office	$56,198	$58,904	$59,000
2. Judiciary	38,135	39,000	56,000
3. Grants	4,173,251	5,125,846	8,385,000
Total obligations	4,267,584	5,223,750	8,500,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	8	8	20
Full-time equivalent of all other positions	1		4
Average number of all employees	9	8	24
Average salaries and grades:			
General schedule grades:			
Average salary	$8,339	$8,269	$8,286
Average grade	GS–11.7	GS–11.6	GS–11.6
Ungraded positions: Average salary	$4,830	$4,830	$1,173
01 Personal services:			
Permanent positions	$62,476	$65,428	$76,625
Part-time and temporary positions	720		3,763
Regular pay in excess of 52-week base	244	240	260
Payment above basic rates	11,717	14,140	14,342
Total personal services	75,157	79,808	94,990
02 Travel	8,791	9,572	10,268
03 Transportation of things	376	2,600	2,600
04 Communication services	1,784	2,000	2,000
05 Rents and utility services	460	200	200
06 Printing and reproduction	2,149	448	448
07 Other contractual services	560	400	1,400
08 Supplies and materials	1,286	1,176	1,076
09 Equipment	3,770	1,700	2,018
11 Grants, subsidies, and contributions	4,173,251	5,125,846	8,385,000
Total obligations	4,267,584	5,223,750	8,500,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Obligations incurred during the year			$8,500,000
Deduct unliquidated obligations, end of year			50,000
Total expenditures (out of current authorizations)			8,450,000

Mr. JENSEN. The committee is pleased to have before it Mr. McConnell, Deputy High Commissioner of the Trust Territory of the Pacific Islands. Mr. McConnell, you, too, have come quite some way to testify before this committee.

Mr. MCCONNELL. Yes, sir.

Mr. JENSEN. Where are you now located?

Mr. MCCONNELL. Our headquarters are still in Honolulu.

Mr. JENSEN. I presume you get down to the trust islands occasionally?

Mr. MCCONNELL. I was there just a short time ago. I made a trip over the trust territory just before I came here.

Mr. DAVIS. You gentlemen will recall that Mr. Thomas was the High Commissioner. Mr. McConnell is Deputy High Commissioner.

Mr. JENSEN. Yes, I was just going to comment on that.

Of course, this committee and many of the High Commissioner's former colleagues were grieved, deeply grieved, to learn of the passing of Senator Thomas who had been acting as High Commissioner of the Trust Territory of the Pacific Islands from the time it was decided to turn the trust islands over to the Department of the Interior until the time of his death.

It was my privilege to be with the Commissioner and Congressman Andersen and Congressman McGrath when we visited the trust islands in November of 1951. I became very fond of Senator Thomas. He was a learned man, and we enjoyed his company very much, but God's will be done, and Mr. Thomas is no longer with us, for which we are deeply sorry.

Mr. McConnell, I presume you have a statement you would like to make.

Mr. MCCONNELL. I do have a statement I would like to read.

Mr. JENSEN. You may proceed.

GENERAL STATEMENT

Mr. MCCONNELL. First, I would like to say that I appreciate again having the opportunity to appear before this committee. I would like to give you a very short outline of some of our forward plans for trust territory management.

In our planning we have certain basic goals in mind. One is to carry out the responsibilities placed upon us by the trusteeship agreement in a modest manner so that, as far as possible, the public services provided will be within reach of the economic potentials of the territory under future native management.

Another is to give maximum promotional incentive to economic projects in an effort to close the gap between governmental expense and governmental income.

A third is to promote private operation of commercial activities in order that to a maximum degree government may confine itself to the normal activities of government.

In so doing it is the intention to promote such private operation under management of the Micronesian people wherever possible.

To meet these various goals it is our intention to take the following steps:

(*a*) Close out the operation of the Island Trading Company by December 31, 1953, in accordance with the provisions of the Appropriation Act of fiscal 1953.

(*b*) Move the headquarters from Honolulu to a location within the Territory as soon as possible.

(*c*) Coincident with the transfer of headquarters to the field we will be able to effect considerable reduction in headquarters personnel and in travel and other administrative costs some of which will be reflected in savings in fiscal 1954.

(*d*) We hope to speed up our steamer service by improvements in the port facilities at the various district centers. Coincidentally, we plan to replace our present AKL vessels by 100- to 150-ton auxiliary-type sailing vessels.

(*e*) After the operation of our steamer service has been smoothed out and regular traffic assured we will be able to reduce the frequency of air operations and effect savings during fiscal 1954 in that category.

Those are our general aims in the near future. I think they are reflected in the budget request which we have presented to Congress.

Mr. JENSEN. Where do you propose that the trust island headquarters be located, on what island?

Mr. MCCONNELL. On the Island of Dublon in the Truk District which is, geographically, centrally located in the area.

Mr. SADY. Truk Island is this atoll here [indicating on map].

Mr. JENSEN. Yes.

(Discussion off the record.)

PERSONNEL

Mr. JENSEN. How many people are now employed in your overall functions, both on the islands and in your head office at Honolulu?

Mr. MCCONNELL. Approximately 300 United States employees.

Mr. JENSEN. How many at your headquarters in Honolulu?

Mr. MCCONNELL. Approximately 45.

ORGANIZATIONAL SETUP

Mr. JENSEN. Tell us, for the record, what your organizational setup is in the islands.

Mr. MCCONNELL. In our organizational setup we were divided into six districts and are still so divided. These are the Saipan District, the Palau District, in which the headquarters is at Koror, the Yap District, the Truk District, the Ponape District, and the Marshall Islands District in which the headquarters is at Majuro.

At each one of those district headquarters we are divided generally into departments which are comparable to those in headquarters, namely, we have an Administrative Section with a district administrator, an administrative assistant and some communications people

there. We have a public health department, which consists of the director of public health, who is in charge of the district hospital, and all of the public health services throughout the district.

We have a district department of education, which is headed by the director of district education, who has the responsibility of operating the schools and directing the operation of the intermediate schools and the supervision of the elementary schools.

Mr. JENSEN. Now, you speak of intermediate schools. Will you explain what you mean by intermediate schools?

Mr. MCCONNELL. Well, the intermediate school is the higher grades of school which carry on beyond the sixth grade.

Mr. JENSEN. Up to what grade?

Mr. MCCONNELL. Up to the ninth grade. Then we have a department called island affairs, which is headed up by the director of island affairs.

Mr. JENSEN. What are his duties?

Mr. MCCONNELL. His duties are to supervise both the political development of the district, and we are leading them as rapidly as we can toward self-government, which goes hand in hand with the economic development, which is also a part of the island affairs department's responsibilities.

Next we have the public works department, which is responsible, of course, for the operation and maintenance of the facilities we have in the district.

Mr. JENSEN. Your personnel is composed of what?

Mr. MCCONNELL. Composed of construction, public works and maintenance people, American employees. We have 7 usually, a plumber, an electrician, a carpenter, a diesel mechanic, a heavy-equipment mechanic, and refrigeration mechanic.

Mr. JENSEN. Now, your physical properties consist of what?

Mr. MCCONNELL. They consist of quarters for our people who are living there, our schools, and the hospitals which are, in many cases, not much more than dispensaries, as you know, from having seen them.

Mr. JENSEN. Yes.

Mr. MCCONNELL. Also our administration buildings, our warehouses, our shops, our refrigeration facilities, and our generating equipment. That makes up the major portion of it. Of course, we do have rolling stock, and we have small boats which also come under the supervision of the public works department.

Mr. JENSEN. Now, go ahead with your other departments.

Mr. MCCONNELL. The only other department we have in the district is a fiscal department, which has the responsibility for financing and supply. The heaviest load of financing is carried on through an interdistrict operation in order to reduce the number of people necessary in each district center so that all of our payrolls are prepared at one central point. But we do have a fiscal man in each district, and a supply man in each district, who has the responsibility for taking care of supplies and screening the requests for supplies as they go through the central office.

Mr. JENSEN. Now, did you mention the agricultural setup?

Mr. MCCONNELL. The agricultural setup is also under the island affairs department as being part of the economic development of the territory.

Mr. JENSEN. Just what do your agricultural personnel do?

Mr. MCCONNELL. In the last year we think we have made a pretty good start in the direction of being sure that we are not being too theoretical in our work in agriculture. At the time we undertook our operations work in agriculture it was done primarily through the department of education with a teacher of agriculture in the schools. We feel that does not give a round enough program, and for that reason we have set up what is called an agricultural teacher-agriculturalist. In other words, he spend half his time in the intermediate schools, and the other half of his time he spends doing agricultural extension work throughout the islands.

Mr. JENSEN. Who is the head of your agricultural teaching staff?

Mr. MCCONNELL. The head of it is a man named Murphy who has had many years' experience in Hawaii. He has been a resident there for a good many years, and we have employed him now for about 6 months. At each district we have a person in the capacity of an agricultural teacher-agriculturalist.

ADJUSTMENT OF CIVILIAN LAND CLAIMS

Mr. JENSEN. Now, we discovered when we were in the trust territory last November that the thing the people there were most interested in was getting their land back, the land which they once had before the Japanese took over. Are you progressing on that?

Mr. MCCONNELL. We are making fair progress on that. I have a statement here of what we have done with respect to the number of claims filed, and the percentage settled, if you would like to have that.

Mr. JENSEN. Yes; I would like to know.

Mr. MCCONNELL. In total we have had 1,560 claims presented. Adjustment has been made in 434 cases, which is approximately 30 percent.

We have done that over a period of not more than a year, because we did not get started on the program until July 1951.

You may recall, sir, when we asked for some additional assistance in the fiscal year 1951, for some supplemental appropriations, it was with the idea of putting on more people to put them on land-claims work. We were not able to put them on until starting in July of last year, but since that time we think we have made some pretty rapid strides in that direction.

It requires a tremendous amount of research work, as you can well imagine, going back to the old Japanese records wherever they are available. It requires the translation of those records, and the principal part of that work has been done on Saipan, where there were records available from the old Japanese corporations there.

Mr. JENSEN. I remember that.

Mr. MCCONNELL. We are well on the way to settling all those claims in the Saipan district.

In the other districts we are even in worse shape as far as records are concerned, and it will have to be done by a meeting of the minds or agreements on the part of the owners of the land or claimants to the

land, which we feel can be, in most cases, satisfactorily handled. Those that cannot be handled by agreement will have to be done through the courts.

TRANSFER OF SAIPAN AND TINIAN TO NAVY CONTROL

Mr. JENSEN. I understand the Navy has again taken over Saipan and Tinian. How did that affect the trust territory operations?

Mr. MCCONNELL. That was done, as you know, by Executive order.

Mr. JENSEN. Yes; I know.

Mr. MCCONNELL. We had meetings with the Navy some months prior to the transfer date in January.

The actual transfer of administration, I might say, was done with considerable smoothness. There was no disruption, as far as management of those two islands was concerned.

We did transfer to the Navy those people who were directly interested in land claim work on Saipan and Tinian, so they are now on the Navy payroll, and should be able to carry on under Navy supervision along the lines we had started.

Mr. JENSEN. The Navy is in control of civil government, then, so to speak; they are in charge of the people on those two islands?

Mr. MCCONNELL. That is right; yes, sir.

Mr. JENSEN. And all of their governmental affairs?

Mr. MCCONNELL. That is right.

Mr. JENSEN. Does that relieve the trust territory of any financial responsibility which may affect this budget request?

Mr. MCCONNELL. We have not asked for any funds for Saipan for 1954.

Mr. JENSEN. You have not asked for any at all?

Mr. MCCONNELL. That is right. We have asked for funds in the Medical Department to pay the Navy for taking care of our patients in the leprosarium on Tinian, and a small insane hospital which we had on Saipan, which will now be under Navy administration. We want to pay them on a per patient basis.

SCHOOL AND HOSPITAL CONSTRUCTION

Mr. JENSEN. How much money are you asking for in this budget for school construction and hospital construction?

Mr. MCCONNELL. That is under "Construction items." For hospitals it is $45,000 and schools, $48,000.

Mr. JENSEN. Are you building any new school facilities or hospital facilities at this time?

Mr. MCCONNELL. No, sir; we have just completed a small addition to the Yap Hospital. You did not stop in Yap?

Mr. JENSEN. No; we did not get to Yap.

Mr. MCCONNELL. We had there two buildings which were approximately 80 feet apart.

Mr. JENSEN. Yes.

Mr. MCCONNELL. And the roofs of each were close to the same height and the floors of each were close to the same height, so we have enclosed that area.

Mr. JENSEN. Built in between?

Mr. MCCONNELL. Built in between; yes, sir, but it would be thought of not as a new hospital, but an expansion of facilities

HEALTH CONDITIONS ON THE ISLANDS

Mr. JENSEN. What are the health conditions on the islands at this time as compared to what they were, say, when we took over the islands?

Mr. MCCONNELL. I would prefer that Dr. Marshall answer that question, but I would say that there is no appreciable difference in that period of time, in that year and a half.

Mr. DAVIS. No; he refers to the time the Navy took over.

Mr. MCCONNELL. Oh, pardon me. I think that there is an appreciable difference there in the health conditions, both as to disease, as to public sanitation methods, and better health throughout the territory.

Mr. JENSEN. How many doctors do we have there now?

Mr. MCCONNELL. We have eight.

MEDICAL SUPPLIES

Mr. JENSEN. Are they getting sufficient medical supplies?

Mr. MCCONNELL. Yes, sir; they are.

Mr. JENSEN. You remember when we were in the doctor's headquarters at Majuro?

Mr. MCCONNELL. That is right.

Mr. JENSEN. The doctor said he had not received a shipment of medicine, I believe, for 6 months, and we asked him why and he said, "I do not know." We asked him if he had put a request for medicine in and he said, "Yes." We said, "Why did you not get it," and he said, "Well, I understand that the funds were not available for it," or some such reason, and I remember I said, "Well, you have sufficient money here, it seems, to employ 20 natives at $20 or $30 a month, and you have sufficient money to pay expenses for nurses' hire, and so forth. Now, if you have no medicine, why have these people around, and why are you here"? And he said, "Well, I am telling you the condition," I do not know why we haven't got medidine."

I said to the High Commissioner, who was then with us, "Do you know anything about that?" and he said, "No," and I said, "I certainly hope that you look into it right away."

That is why I am asking you the question now, Are the doctors getting sufficient medical supplies to take care of their needs?

Mr. MCCONNELL. Yes, sir; they are without any question getting sufficient medical supplies.

Mr. JENSEN. I am glad to hear it because it was the most disturbing thing, I think, that we heard when we were there. There certainly was no excuse for it.

Mr. MCCONNELL. You will recall, I think, that there is some testimony in last year's hearings on that point, and at that time I believe I made the statement that I felt that the doctor had exaggerated the situation considerably. I can understand why a man, in his eagerness to get to the top people, might have overdrawn a situation which had bothered him and would have naturally testified that way before the committee. However, it was never a fact that anyone died in that area through the lack of medicine. That was never a fact.

There were disturbances over the supply situation which were occasioned by the transfer from the Navy to the Department of the Interior, where they charged us with supplies that were on order, and then later some of those requisitions were canceled by the Navy while we thought the requisitions were still on their way to the islands. But that is a thing that has since been corrected, and they are now getting and have always had enough medicine, so that there have never been any deaths in the islands through the lack of medicine.

LANDOWNERSHIP PROBLEM

Mr. JENSEN. It does appear to me that the return of this land to the former owners has not progressed as fast as it could have. Of course, I realize that you have big problems there in translating Japanese land contracts and all of that, but those oldtimers down there complained considerably about the fact that they had not been able to get their land back, and hence they were at the mercy of the United States to furnish them a living or subsistence.

Is there any controversy between the natives on the different islands as to whom this tract of land or that strip of land belongs to? Is there any controversy between the natives about that?

Mr. MCCONNELL. Not that I know of, sir. I would like to have this placed in the record: that there is no native who is without land which he can work, either for raising coconuts or yams or breadfruit or anything else.

Mr. JENSEN. You see to it that he has a piece of land that he can till, on which he can produce food and fiber?

Mr. MCCONNELL. Every one of them; yes, sir. The difficulty is that we have not been able to clear up the titles, and some of those people, very properly, want to have the title cleared on the land which they are working.

We are moving as fast as we can, with resources that we have, both in money and personnel, to try to do that. The claims of islanders against the Armed Forces for land which was used by the Armed Forces during the war and after the war have not been settled as yet, and have not even been approached. That is a matter in which we expect to act in the interests of the islanders, but it is the responsibility of the Armed Forces in the first instance to attempt to settle those claims.

ISLAND TRADING COMPANY

Mr. JENSEN. What has been done about paying into the Treasury $1,801,934 reserves for Navy subsidy, as was directed in last year's bill?

Mr. MCCONNELL. We are making very great strides in that direction, sir. We have put approximately $800,000 in, and we feel that we can probably pay the balance by June 30 of this year.

Mr. JENSEN. All right. Now, you have already explained the liquidation of the Island Trading Company.

Mr. MCCONNELL. Yes, sir; that is right.

Mr. JENSEN. You say that will all be accomplished by December 31?

Mr. McConnell. Yes, sir, by December 31; that is right.

That is going to present some considerable problems, as far as the economy of the territory is concerned, when the Island Trading Company is dissolved.

We are using our best efforts to encourage the Micronesian people to form wholesale companies and retail companies to take over the operations of the Island Trading Company. They can do it in all cases where they have been able to engage some American management, and that has been pretty well smoothed out in three of the districts. They have been, in those cases, trying to get financing, and it is for that reason that there is language in the proposed act to permit the residue over and beyond $1,800,000 to be used by the High Commissioner for economic purposes, such as making loans to these local companies in order that they may buy copra and bring it out to the district centers. We feel that is extremely necessary, because otherwise they are not in a financial position to take care of it.

STATUS OF ORGANIC LEGISLATION

Mr. Jensen. The 1953 bill provides that no funds are to be available at all unless they have obtained organic legislation by June 30, 1953. I think Mr. Davis spoke of that.

Mr. Davis. Mr. Chairman, the proposed organic act was submitted to the committees at the beginning of this Congress, but it has been returned to the Interior Department for revision since the change of administration, and it has gone to the Secretary's desk for transmission through the Bureau of the Budget.

Mr. Jensen. Yes.

Mr. Davis. In addition to that, there is the Cordon joint resolution which authorizes the continuation of the civilian administration pending the enactment of the organic act. It has been introduced in the Senate, but I believe that there has been no action on it as yet.

SUMMARY OF OBLIGATIONS BY FUNCTIONS

Mr. Jensen. Without objection, I would like to have the tables on pages 64, 65, and 66 of the justifications included in the record at this point.

(The matter referred to is as follows:)

Summary of obligations by functions

Activity	1953 appropriation	1954 estimate	Increase (+) or decrease (−)
1. Health, Education, and Welfare:			
(a) Public health:			
(1) Hospitals	$494,497	$479,680	−$14,817
(2) Field medical services	76,864	158,700	+81,836
(3) Medical training	30,000	40,000	+10,000
(4) Administrative	80,189	76,970	−3,219
Total, public health	681,550	755,350	+73,800
(b) Education:			
(1) PICS	73,362	67,670	−5,692
(2) Intermediate schools	174,225	261,431	+87,206
(3) Elementary schools	172,409	67,500	−104,909
(4) Special training	5,568	7,000	+1,432
(5) Administrative	42,436	51,970	+9,534
Total, education	468,000	455,571	−12,429
(c) Economic and political development:			
(1) Land and claim settlements	100,966	129,430	+28,464
(2) Agriculture and fisheries development			
(3) Commercial development			
(4) Internal governmental affairs	312,388	332,486	+20,098
(5) Administrative	66,646	79,602	+12,956
Total, economic and political development	480,000	541,518	+61,518
(d) Legal and public safety	150,000	122,780	−27,220
Total, legal and public safety	150,000	122,780	−27,220
2. Operation and maintenance:			
(a) Operation and maintenance of physical plant:			
(1) Buildings	266,000	192,787	−73,213
(2) Power facilities	450,300	252,438	−197,862
(3) Water and sewers	194,000	135,494	−58,506
(4) Marine facilities	126,600	122,500	−4,100
(5) Streets and roads	151,000	127,581	−23,419
(6) Other equipment—Includes replacement	204,500	190,460	−14,040
(7) Central repair shop	59,000	50,000	−9,000
(8) Salvage operation	40,000	28,000	−12,000
(9) Special maintenance projects	298,807	81,100	−217,707
(10) Interdistrict field office	53,500	56,300	+2,800
(11) Administrative	32,100	40,800	+8,700
Total, operation and maintenance of physical plant	1,875,807	1,277,460	−598,347
(b) Radio communication system	112,000	98,617	−13,383
Total, radio communication system	112,000	98,617	−13,383
3. Transportation services:			
(1) Sea transportation	1,272,895	997,000	−275,895
(2) Air transportation	439,750	403,000	−36,750
Total, transportation services	1,712,645	1,400,000	−312,645
4. General administration:			
(a) High Commissioner's staff	490,450	483,947	−6,503
(b) District administration staff	261,900	163,400	−98,500
(c) Finance and supply	272,000	245,636	−26,364
(d) Personnel	412,300	323,221	−89,079
Total, general administrative	[1] 1,436,650	1,216,204	−220,446
Grand total	6,916,652	5,867,500	−1,049,152
Estimated savings account transfer Saipan District	−270,000		−270,000
Total cost of government	6,646,652	5,867,500	−779,152
Local revenues applied	[2] 1,520,806	[3] 1,307,500	−213,306
Net grant funds	5,125,846	4,560,000	−565,846
Construction		3,825,000	+3,825,000
Total grants	5,125,846	8,385,000	+3,259,154

[1] Includes $51,111 balance 1952 revenues.
[2] Includes $302,111 of estimated local revenues not specifically applicable to districts.
[3] Includes $310,000 of estimated local revenues not specifically applicable to districts.

Mr. JENSEN. Now the report of the House on the 1953 bill requires that funds be spent for a specific list of items.

The budget presentation for 1954 ignores this fundamental breakdown. I am going to ask why has that been ignored. The breakdown included amounts for the High Commissioner's Office, judiciary, grants, general administration, legal and public safety, agriculture assistance and land title work, public health, education, and public works.

Mr. MCCONNELL. I believe that all of that information is included between pages 61 and 66.

Mr. JENSEN. You say it is?

Mr. MCCONNELL. Yes, sir, I would think it is. We have it broken down by functions and also by activities, Mr. Chairman.

AGRICULTURAL, FISHERIES, AND COMMERCIAL DEVELOPMENT

Mr. JENSEN. The thing I noticed in particular in running through this list of functions is that you are asking for no money whatever for agriculture and fisheries development or commercial development. Now why?

Mr. MCCONNELL. That is just because of the makeup of this schedule, sir. Those funds are included in this item 4, "Internal governmental affairs." As to the items on agriculture and fisheries development and commercial development I shall be happy to give a breakdown of them.

Mr. JENSEN. Will you put that in the record?

Mr. MCCONNELL. Yes, sir.

(The matter referred to follows:)

STATEMENT OF AMOUNTS ALLOCATED FOR AGRICULTURAL, FISHERIES, AND OTHER COMMERCIAL DEVELOPMENT

As indicated in the testimony, the amounts noted in the "Summary of obligation by function" under the category of "Internal governmental affairs" include provision for agricultural and fisheries development and other commercial development broken down as follows:

	1953	1954	Increase (+) or decrease (−)
Agriculture and fisheries	$115,334	$139,995	+$24,661
Other commercial development	32,205	25,966	−6,239
Internal Government affairs	164,849	166,525	+1,676
Total	312,388	332,486	+20,098

LAND TURNED BACK TO ORIGINAL OWNERS

Mr. JENSEN. How many acres of land, approximately, have been turned back to the original owners up to date? Give us that figure if you can.

Mr. MCCONNELL. I do not have it just that way in acres.

Mr. JENSEN. You do not?

Mr. MCCONNELL. I could get that information for the committee, however. I have it in number or claims.

Mr. JENSEN. What percent of them have been granted?

Mr. MCCONNELL. It is 30 percent of the claims which have been filed.

REVENUES

Mr. JENSEN. Local revenues are estimated at $1,520,806 for 1954. According to some recent newspaper articles copra prices are the highest they have ever been. What is the estimated carryover in local revenues as of June 30, 1953?

Mr. MCCONNELL. We do not estimate any carryover from June 30, 1953, until June 30, 1954. These local revenues were estimated for 1953 at, I believe, the figure that you gave.

Mr. JENSEN. $1,520,806?

Mr. MCCONNELL. That is right.

Mr. JENSEN. For 1954?

Mr. MCCONNELL. No, sir; for 1953.

Mr. JENSEN. That is your estimate for 1953?

Mr. MCCONNELL. Yes, sir. The estimate for 1954 is somewhat less than that because we will not get local revenues from the Saipan district.

Mr. JENSEN. Those revenues will go into the Navy fund?

Mr. MCCONNELL. Yes, sir.

Mr. JENSEN. What is the price of copra right now?

Mr. MCCONNELL. The last sale we made of copra was in Japan at $245 a ton.

Mr. JENSEN. $245 a ton?

Mr. MCCONNELL. Yes, sir.

Mr. JENSEN. That is a pretty high price.

Mr. MCCONNELL. Yes, sir; that is right, but the revenue from that, of course, comes in the nature of a tax of 15 percent on the sale of copra. However, not so long ago, within this fiscal year, the price was only $126 a ton, so we had a very much lesser revenue from our tax.

Mr. JENSEN. Why is it that the estimate on local revenues for 1954 is so much less than for 1953?

Mr. MCCONNELL. Part of the reason is because of the loss of revenues from the Saipan district, because these revenues not only include such things as the copra tax, but they also include any return that we get for the sale of power, the sale of water, or the sale of fuel, and in the Saipan district those sales were considerably greater than in any of the other districts.

Of course, there is an offsetting cost in our budget for the furnishing of that power, but the revenues include such receipts, and they were far greater in Saipan than anywhere else because of the activities in the Saipan district.

CONSTRUCTION

Mr. JENSEN. You are asking for construction funds for almost every district, I note.

Mr. MCCONNELL. We have never had any construction funds. All we are asking for in the way of an increase over 1953 is in the construction account.

NEW HEADQUARTERS

Mr. JENSEN. What is the estimated cost of the headquarters construction on the island of Dublon?

Mr. MCCONNELL. For the headquarters itself it amounts to $605,000. The figure we have shown there is a combination of head-

quarters and a district center, in which the estimated total cost was approximately $3,900,000.

Mr. JENSEN. Over what time?

Mr. MCCONNELL. Spread over a period of 2 years; $2 million of it is for fiscal year 1954.

Mr. DAVIS. Explain the transfer of the district headquarters involved in that situation.

Mr. MCCONNELL. Presently the headquarters of the Truk district is on the island of Moen, which is the place you visited. You will recall, unquestionably, that there were only two buildings there which might be considered as being permanent buildings of any lasting value. One was the relatively small administration building, and the other was the so-called hotel.

Our plans for any long future at all would require that every other facility there be replaced with something more permanent. That includes the Pacific Island Central School, the hospital, the intermediate school, the generating plants and refrigeration plants; and heavy repairs to the docks even as they are. We have found that if we go over to the island of Dublon we have a much better starting point than we ever had on Moen. I do not know the reasons behind it, but frankly I am surprised that the Navy did not take the island of Dublon as the headquarters of the Truk district at the time they started administration. I have been told that there were Jap prisoners on that island at that time, and that might have been one of the reasons why they did not do it.

Anyway, there are concrete roads over there. There is an adequate water supply with very little work to be done to it.

On Moen Island, our present district headquarters, we are always up against the matter of water supply. Our roads are in horrible shape and require complete rebuilding. On Moen Island we can never have access to deep water, whereas on Dublon there is access to the construction, and not very expensive, once we can get access to deep water, which is one of the important things we need in the logistic support of the territory, to be able to get into a position where commercial vessels from the United States can come into those district centers and we can get out of this government business of running a surface transportation system.

To my way of thinking it is most important that we move the district center to Dublon, whether we ever move headquarters there or not.

The headquarters portion, of that total of $3,952,000, is about $605,000, which would take care of housing and the additional administrative building and some addition to the water supply and sewage disposal.

BUILDING MATERIALS

Mr. JENSEN. When the Navy took over the island of Saipan they, of course, also took over all the buildings?

Mr. MCCONNELL. Oh, yes, sir. There were a tremendous number which were not needed for the administration.

Mr. JENSEN. We all expected to build necessary living quarters and other buildings in the trust territories from that used lumber. Did the Navy indicate that they wanted to keep all those buildings for their own use?

Mr. McCONNELL. They did not indicate, sir, that they wanted to keep them for their own use; but they indicated very directly that we could not have them.

Mr. JENSEN. Well, I am sorry to know that. If the Navy needs them, of course, that is all right. That is another thing.

But there we have millions of feet of fine lumber, as well as asbestos corrugated roofing, which all of us had high hopes could be used in the building of homes and schools and everything else needed in that great expanse.

Mr. McCONNELL. That is right, sir. We had a salvage program, as you will recall, going on.

Mr. JENSEN. Yes.

Mr. McCONNELL. We did tear down some of those buildings. We left them all in good order. We left none that were partially torn down. We did completely dismantle several of those big warehouses. We salvaged the lumber and we have spread it around the various districts. We have it as a reserve.

Mr. JENSEN. You did get some of it spread around over the other atolls?

Mr. McCONNELL. Yes, sir.

Mr. JENSEN. I am glad to hear that.

Mr. McCONNELL. But we did not get enough, I might say.

Mr. JENSEN. I am sure of that.

Mr. McCONNELL. We had to stop that salvage operation on January 1. We were permittted to take out of the district some of that lumber which we had already torn down and stacked up and which was ready to ship.

(Discussion off the record.)

LOCATION OF HIGH COMMISSIONER'S OFFICE

Mr. JENSEN. You are on the islands a great deal, Mr. McConnell?

Mr. McCONNELL. Yes, sir.

Mr. JENSEN. Do you have a lot of natives come to you with their problems?

Mr. McCONNELL. They do; yes, sir.

Mr. JENSEN. You not only have to handle the problem of the natives, but you have to see to it that your six district offices are operating according to the way they should be. Do you ever find it necessary to refrain from making a decision on the spot? Do you you ever find it necessary to take the matter to the High Commissioner or to the Secretary of the Interior, for instance?

Mr. McCONNELL. I rarely make a decision. I might say I never make a decision on a policy matter on the spot and have many times used the method which you outline, by answering the natives, on a problem of that kind, by saying that that is something which requires staff consideration. When I return to headquarters in Honolulu I will take it up with the staff and we will give them a reply afterward, which we always do.

Mr. JENSEN. All right. With the High Commissioner stationed at Dublon, for instance, then what position would you be in when these problems of policy are brought to your attention?

Mr. McCONNELL. In all likelihood he would have to hold himself somewhat aloof from direct appeals by the island people by using me, perhaps, or my successor as a buffer.

Mr. JENSEN. Would the natives appreciate that, if the High Commissioner were there? Do they consider the High Commissioner the last word?

Mr. MCCONNELL. That is hard for me to answer, sir.

Mr. JENSEN. That is why I question the advisability of having the High Commissioner of the trust islands there. There are times when matters of far reaching importance must be decided and it is possible that the natives would expect them to be decided right now if the Commissioner were there. If he were not there he would have more time to look into the matter and possibly decide it more equitably and fairly and properly.

I wanted to bring that up because the problem of the trust islands is really important. They are a fine group of people. I certainly just fell in love with them. They are so proud, and they are happy to be under the management of the United States. We want them always to feel that way. They are a part of us, and we want them to feel as a part of us.

We do not want to change their traditional customs any faster than they want to change. Maybe they do not want to change their customs, because, after all, I find that they are a pretty happy lot in their own state. They are the easiest smiling people I ever had the privilege of meeting. I often thought when I was down there that it might be wrong to attempt to bring them up to our way of doing things, which they do not understand, and which they do not have the natural resources to accomplish, as to a standard of living. I do not believe they want to change their mode of living.

So I hope that we can take this thing gradually and work with them and let them know that we want to do what is right. But we do not want the thing to evolve into another Indian Bureau, like we have here on the mainland. It seems the Indian problem has become greater and greater each year instead of being solved, because we white people try to impose on the Indians a lot of things that they do not appreciate.

Mr. DAVIS. I would like to say that we do very much appreciate what you are saying, and I can thoroughly agree with the wisdom of your remarks—not perhaps on every single point; but they certainly are stimulating and provocative. We do most cordially agree with you on encouraging by every means the self-sufficiency of these people and never giving them the feeling that they are wards or that the United States Government is going to be responsible for everything they do.

We believe most thoroughly in local authority and decentralization of authority to the highest degree possible. We think the key to the situation is to get an excellent administrator and to give him all the authority needed to operate in that area. We are trying by every possible means to do that.

I call your attention to the fact that in the justifications we have broken down the expenditures and estimates not only by general functions, and so on, but by districts. You will find beginning on page 67 an analysis of the expenditures in each district allocated to different functions carried out there.

Mr. JENSEN. Yes.

Mr. DAVIS. Our thought is of the district primarily, and not of a big headquarters staff and not of building up any overall organization.

TRAINING OF NATIVES

Mr. JENSEN. You are training a number of native islanders in all the different phases of government?

Mr. MCCONNELL. Yes, sir.

Mr. JENSEN. The nurses, doctors, those engaged in agriculture and mechanics. As you train these natives to do the job that Federal employees have been doing, do you think of turning over as fast as you can the responsibility to the natives, and relieving the Federal employees?

Mr. MCCONNELL. Very definitely, sir.

Mr. JENSEN. How are you handling it?

Mr. MCCONNELL. I would like to give you one or two examples of what we are doing along that line. We have recently intensified our training program and are operating in the Truk atoll a really intensive program of training Micronesian people in all the activities in which we are engaged.

We are not only training those people, but we are training our United States employees in the various fields how to train their opposite numbers. We found in the course of the first year that despite how much they might want to do that some of our people were not able to do it because they did not know the methods which should be used in training a person, particularly one who spoke a different lanugage and did not speak English too fluently. So we have a very definite training program at work now.

Then we are making such moves as this: We have had an employee in each district known as an elementary-school supervisor, who was an American. Beginning this June in all the districts, and perhaps in one or two prior to this June, we are putting a Micronesian in that position as elementary-school supervisor, to go around the islands. We will still have, for another year or perhaps more in some districts, to keep our American there, but he will not have the title of elementary school supervisor. He will have the title of elementary-school-supervisor adviser, and he will constantly advise this other man. As soon as possible he will just step out of the picture.

In other words, we are trying very actively to intensify and speed up this matter of transferring the governmental activities to the Micronesian people.

ANALYSIS BY ACTIVITIES

Might I suggest, sir, that these other three tables on pages 61, 62, and 63 of the justifications should also be put in the record? That includes the High Commissioner's Office and the judiciary, which you inquired about.

Mr. JENSEN. Yes, without objection.

(The tables referred to are as follows:)

(a) *High Commissioner's Office*

Subactivity	Adjusted appropriation	Decreases	Base, 1954	Estimate, 1954	Increases
Personal services	$46,308		$46,308	$46,308	
Travel	6,072		6,072	6,168	96
Transportation of things	2,100		2,100	2,100	
Communication services	1,500		1,500	1,500	
Rents and utility services	200		200	200	
Printing and reproduction	448		448	448	
Other contractual services	400		400	400	
Supplies and materials	676		676	676	
Equipment	1,200		1,200	1,200	
Totals	58,904		58,904	59,000	96

NOTE.—The amount requested for the High Commissioner's Office includes the following positions:

High Commissioner, Grade GS-18
Deputy High Commissioner, Grade GS-15
Administrative assistant, Grade GS-9
Secretary, Grade GS-5

It is estimated that the obligations for this activity will continue at approximately the same level as during the current fiscal year.

(b) *Judiciary*

Subactivity	Adjusted appropriation	Decreases	Base 1954	Estimate 1954	Increases
Personal services	$33,500		$33,500	$48,682	$15,182
Travel	3,500		3,500	4,100	600
Transportation of things	500		500	500	
Communication services	500		500	500	
Other contractual services				1,000	1,000
Supplies and materials	500		500	400	−100
Equipment	500		500	818	318
Totals	39,000		39,000	56,000	17,000

NOTE.—The $17,000 increase in this item is largely due to a request for funds to bring under the judiciary appropriation the salaries of Micronesian, district, and community judges, clerks of court, assessors, and interpreters. This action would appear logical and appropriate because the judiciary has been established as a branch of the government independent of the legislative and executive. These salaries have been paid in previous years from the grant funds.

(c) *Grants*

The total cost of the government of the Trust Territory of the Pacific Islands in 1953 is estimated to be $6,646,652, of which $1,520,806 will be financed from local revenues and the balance, $5,125,846, from grant funds appropriated by the Congress for operating costs for the current fiscal year. No funds were appropriated for construction projects in 1953.

It is estimated that the total cost of the government of the trust territory in fiscal 1954 will be $9,692,500, of which $1,307,500 will be financed from local revenues, and the balance, $8,385,000 is requested herein. The total estimate of $8,385,000 for grants includes $4,560,000 for operating costs and $3,825,000 for urgently needed construction projects, and is distributed by functions and districts, as follows:

BY FUNCTION

(a) Health, education, and other services	$1,875,219
(b) Operation and maintenance	1,376,077
(c) Transportation services	1,400,000
(d) Construction	3,825,000
(e) General administration	1,216,204
Total cost of government	9,692,500
Less local revenues	1,307,500
Total grants	8,385,000

BY DISTRICT

District	Operating costs	Construction	Total
Koror	$576,574	$642,000	$1,218,574
Yap	316,530	224,000	540,530
Truk	591,332	2,000,000	2,591,332
Ponape	531,675	355,000	886,675
Majuro	495,115	538,500	1,033,615
Interdistrict	2,681,382	65,500	2,746,882
General administration	674,892		674,892
Total cost of government	5,867,500	3,825,000	9,692,500
Less local revenues	1,307,500		1,307,500
Total grants	4,560,000	3,825,000	8,385,000

POPULATION

Mr. JENSEN. Do you have a statement showing the population in each district?

Mr. MCCONNELL. I can furnish it, sir. I do not have it.

Mr. JENSEN. I wish you would do that.

(The information referred to follows:)

Trust Territory of the Pacific Islands—Population by districts

District	*Population*
Saipan	6,701
Palau	8,652
Yap	3,535
Truk	15,848
Ponape	11,205
Marshalls	11,096
Total population	57,037

Mr. JENSEN. What is the total population?

Mr. MCCONNELL. The total population is approximately 57,000.

Mr. JENSEN. All of them are Micronesians except the Federal employees now working on the trust islands, and a very few others?

Mr. MCCONNELL. A very few. You perhaps met the Escheits, down on Ponape. There are a few families, and a few missionaries.

MISSIONARIES

Mr. JENSEN. I do want to say right now for the record that I think the missionaries, both Catholic and Protestants, have done a wonderful job in the trust islands. You know, it took me quite awhile after I got down there to learn why those folks were quite a happy lot. I discovered that they were deeply religious and they just had something to hold onto. They believed that even though they are in rather low state, with a rather low living standard, that all will be well so long as they have trust in God. So I must say that certainly our missionaries have done a wonderful work among those people of the far Pacific.

Mr. MCCONNELL. Might I say, sir, that of our employees those who are the most successful and those who are now staying on for second contracts are those who also have a missionary spirit.

Mr. JENSEN. Is that right?

Mr. McCONNELL. Maybe not in any particular religion, but they have a missionary spirit to try to do the job in the right way and they have a real interest in what they are doing out there with those people.

Mr. JENSEN. That is fine. I am glad to hear that.

COPRA STABILIZATION FUND

Why is the copra stabilization fund necessary?

Mr. McCONNELL. I would say, Mr. Chairman, that the facts pretty well speak for themselves on that. We have been able to draw on the copra stabilization fund during this past year to prevent a drop in the field price of copra which conceivably would have meant stopping all collections of copra and of exporting it to the world market. If the field price had had to ride with the world price there would have been a time when we could not have paid more than $40 a ton for copra in the field. The islanders will not collect copra at $40 a ton. They cannot afford to do it, really.

The use that they make of the money that they get from copra is largely for the purchase of rice, sugar, flour, and some clothing; $60, or $50, is about the minimum price that you can pay them and have any incentive to the producer to gather copra.

By using our copra stabilization fund we have been able to keep the price from dropping below $70. Even at $70 our export of copra this year is going to be less than it was in the last fiscal year. That is about the only reason why it should be less.

I say again that an examination of the fact, I think, will prove that it was certainly wisdom on the part of the Navy Department when they started this copra stabilization fund, and we would have had a very disastrous commercial situation out there if we had not had it to rely on this last year. I would certainly like to see it continued, sir.

EXPLANATION OF SPECIAL FUNDS

Mr. JENSEN. I wish you would put in the record an explanation of the purpose for each of these special funds you have.

Mr. McCONNELL. I would be happy to, sir.

Mr. JENSEN. And the authority for the same and the estimated assets of each type, as of June 30, 1953.

Mr. McCONNELL. All right, sir.

(The information is as follows:)

STATEMENT OF THE PURPOSE, AUTHORITY AND ASSETS OF SPECIAL FUNDS OF THE GOVERNMENT OF THE TRUST TERRITORY

There is described below the nature and status of special funds which were established with deposits from mining, copra sales, and other activities of the Islands and earmarked for specific purposes. All of these funds were established by authority of the High Commissioner during the period of naval administration and have been continued since that time under the implied authority of the 1953 appropriations act inasmuch as they do not represent new activities and involve contractual obligations and other vital requirements which can be met only through continuance of the funds. No appropriated moneys have been deposited into these funds, and since they are self-supporting they have not previously been included in appropriation requests for the trust territory either during the period of naval or civilian administration. However, in order to present a complete picture of all trust territory government operations, the information presented below was included on pages 113 through 123 of the appropriation justification submitted to this subcommittee. As will be noted in the analyses

which follow, the nature of these trust, revolving, and other special funds and the manner in which they were established are such that it would be inappropriate for them to be included in the regular operating budget of the trust territory.

Statement of copra stabilization fund, June 30, 1952

BALANCE SHEET

Assets:	Amount
Cash on deposit, Wells Fargo Bank & Union Trust Co	$70, 152. 29
Investments (obligations of U. S. Government)	167, 515. 52
Due from Island Trading Co	50, 000. 00
Total assets	287, 667. 81
Liabilities and net worth:	
Due Island Trading Co	235, 486. 76
Net worth (see analysis below)	52, 181. 05
Total liabilities and net worth	287, 667. 81

STATEMENT OF ANALYSIS OF NET WORTH

Net worth June 30, 1951		$284, 667. 88
Increases:		
Contribution by Island Trading Co	$50, 000. 00	
Copra processing tax	50, 456. 11	
Interest on investments	5, 158. 79	
Total increases		105, 614. 90
Total		390, 282. 78
Decreases:		
Loss on sale of bonds	$265. 32	
Federal wire charges	2. 90	
Accounting fees	175. 00	
Service fees	192. 00	
Subsidies to Island Trading Co	337, 466. 51	
Total decreases		338, 101. 73
Net worth June 30, 1952		52, 181. 05

COPRA STABILIZATION FUND—PURPOSE AND JUSTIFICATION

The price of copra in world markets fluctuates frequently and over a wide range. For example, the year 1952 saw copra as low as $110 per short ton and as high as $225 per short ton c. i. f. San Francisco. Most of the costs of collecting the copra in the islands and delivering it to market do not fluctuate with changes in the market price. Such items as freight, port charges, bags, warehousing, and supervisory costs remain at the same level per ton regardless of the market price. This means that when a reduction in the market price occurs practically the full amount of such reduction comes out of the funds available to pay the producer for his copra. A 50 percent drop in the market price can hence mean a 70 percent drop or more at the producer level.

Copra affords the main source of dollar income for the people of the trust territory. The next most valuable crop provides less than 10 percent as much income as copra. This situation means that the incomes of the people are subject to violent fluctuations if payments to copra producers are tied to the ups and downs of the world market. Alternating periods of feast and famine prevent the growth of steady work habits and desirable consumption patterns and deter the development of stable business in other lines in the islands. The copra stabilization fund is used to mitigate the drastic changes in the world price of copra and to provide greater stability of income in order that these undesirable effects can be avoided.

The copra stabilization program operates through the maintenance of an official buying price for copra at the various collection points. When world prices are high and the copra is sold for more money than is necessary to pay the official price plus marketing costs the excess money is put into the copra stabiliza-

tion fund. When world prices are low and insufficient revenue is derived to cover the official price plus marketing costs the deficit is made up by payments out of the copra stabilization fund. No attempt is made to hold the official price absolutely constant. During the major upswings of the market part of the higher price is passed along to the producer. Similarly during major downswings the official price is lowered so that the producer bears part of the decline. However, changes are infrequent and are held within tolerable bounds which do not disrupt the island economy. Since the stabilization program has been in operation there has been a difference of $210 per short ton between the highest price received in the world market for trust territory copra and the lowest price received. The official buying price in the islands has varied only over a $60 range in this time, which indicates the degree of stabilization accomplished.

This is not a price support program. It does not use funds from United States Government sources. It is self-financed through withholding proceeds of copra sales in good times for distribution in bad times.

Statement of Anguar Mining trust fund, June 30, 1952

BALANCE SHEET

Assets:		
Cash on deposit:		
Bishop National Bank:		
Checking account	$9, 985. 70	
Savings account	4, 000. 00	
		Amount
		$13, 985. 70
Investments (obligations of U. S. Government)		610, 931. 53
Total assets		624, 917. 23
Liabilities and capital:		
Capital (net worth)		624, 917. 23
Total liabilities and capital		624, 917. 23

STATEMENT OF ANALYSIS OF NET WORTH

Net worth, June 30, 1951		$366, 678. 17
Increase:		
Severance fees	$265, 888. 77	
Interest on investments	8, 022. 50	
Total increases		273, 911. 27
Total		640, 589. 44
Decreases:		
Accounting fees	$300. 00	
Shipping charges on bonds	7. 22	
Bank charges on checks	. 05	
Bank commissions	364. 94	
Distribution to beneficiaries	15, 000. 00	
Total decreases		15, 672. 21
Net worth, June 30, 1952		624, 917. 23

ANGAUR MINING TRUST FUND

This fund was established pursuant to an agreement of December 1949, between the people of Angaur Island, representatives of SCAP, and representatives of the High Commissioner for the mining of phosphate rock on Angaur. With the termination of SCAP a new agreement for continuation of the mining was concluded by the High Commissioner.

The trust fund is augmented by the payment of a severance fee for each ton of phosphate ore removed from Angaur. The income of the fund is, by agreement, to be paid, during the lifetime of the permanent residents of Angaur at the time of the agreement, partially to the clans who own the land where the phosphate ore is mined and partly to the municipality of Angaur for distribution to the clans owning no phosphate-mining land and for municipal operations.

Statement of estimated revenues and expenditures—economic development, conservation, and welfare fund

Detail	Fiscal year 1953	Fiscal year 1954
Balances July 1	$107,868	$28,942
Revenues:		
Transfer of unobligated balances, new enterprise		
Projects from Island Trading Company	67,474	
Phosphate severance tax	50,600	52,000
Bauxite severance tax		50,000
Copra sales (Metalanim plantation)	30,000	50,000
Totals	255,942	180,942
Expenditures:		
Marianas cattle-introduction project	45,000	
Beetle-control program	8,000	8,000
Poultry project	4,500	
Cacao development	35,000	35,000
Coffee development	17,000	
Metalanim plantation	30,000	25,000
Agricultural products introduction and experimental stations	25,000	25,000
Marshall Islands typhoon relief	10,000	
Palau Welfare Center	7,500	
Salvage inspection projects	15,000	
Tree-crop experiments	10,000	
Animal introduction	10,000	
Hydrological investigations		10,000
Land rehabilitation		12,000
Other projects	10,000	
Totals	227,000	115,000
Balances at end of fiscal years	28,942	65,942

Statement of economic development, conservation and welfare fund, fiscal year 1952

Detail	Amount	Total
Conservation fund transferred from Navy June 30, 1951		$62,620.04
Processing taxes collected on phosphate removed from Anguar during fiscal year 1952	$111,505.53	
Less amount transferred to grant and local funds for operation of Metalanim plantation and beetle program	64,239.26	47,266.27
Balance		109,886.31
Expenditures:		
Salaries	319.79	
Travel	1,236.35	
Accounting fees	175.00	
Materials and supplies	287.41	2,018.55
Unexpended balance June 30, 1952		107,867.76

ECONOMIC DEVELOPMENT, CONSERVATION AND WELFARE FUND—PURPOSE AND JUSTIFICATION

The purpose of the economic development, conservation and welfare fund is to carry out certain experimental work in a modest way looking toward the improvement of the economy of the Territory, to carry out certain reforestation and other land rehabilitation projects, and to meet emergency needs of native welfare stemming from economic pressures or physical disaster.

The fund was accumulated from moneys earmarked for conservation purposes derived from Anguar phosphate operations and from money transferred from Island Trading Company for the continuation of projects which had been established by that company. The moneys later going into the fund will come from levies against operations which deplete natural resources and from income from economic-development projects.

The purpose of establishing and maintaining this fund is to provide a source of funds for the promotion of economic-development programs and to carry on conservation and general welfare functions which are not otherwise provided for in the budget. The fund is administered by the economic development, conservation and welfare fund through its committees.

The Economic Development Committee of the Board studies problems pertinent to the development of the economy of the trust territory and plans programs and projects to promote the economic advancement and self-sufficiency of the inhabitants. The committee is responsible for the technical administration, operation, and management of approved projects. Following is a brief description of some of the projects which illustrate the type of work carried on in this field.

Cacao research and development

A special project has been initiated in 3 of the 6 administrative districts which has as its purpose the development and promotion of cacao as a cash crop. Primary emphasis is placed on the development of a small cacao station in the Palau Islands to serve as a demonstration center and to produce seedling stock for distribution to the Micronesians.

Metalanim plantation

This is a coconut plantation which was developed by private interest during the Japanese administration of the islands. It contains approximately 2,700 acres. During the war it was neglected and became overgrown and nonproductive. In 1948 it was decided that the plantation should be rehabilitated and operated as a government project. Rehabilitation work continues and the plantation currently is producing about 17 tons of copra per month.

The fund pays all expenses of the operation and receives the income produced. Because of the extra rehabilitation necessary the plantation necessarily operates at a loss at the present time.

Truk poultry project

During the war the poultry population of the islands was practically wiped out. A rather extensive reintroduction and educational program is necessary to restore poultry production in the island. A hatchery and distribution center was established on Truk which produces young stock and hatching eggs for distribution to other centers in the area.

Coffee project

During the former administration, coffee had been introduced into the Mariana Islands but the project was neglected during the war. Rehabilitation of the coffee plantings has been undertaken and a very small production achieved during the past year. Prospects for reviving this cash crop on a relatively limited scale appear to be good and plans are being made accordingly. A person skilled in coffee production is currently employed on the project.

Marianas' Cattle Experiment and Introduction Station

This project has as its purpose the establishment of a sound breed of cattle which will be tolerant of the conditions of climate and disease found in the Marianas. Experiments would indicate that certain cross-bred animals will prosper in the climate found there and further experiments and adaptation should produce cattle which will be satisfactory for the area.

The Conservation Committee of the Board studies problems concerned with the conservation of natural resources and develops plans and recommends projects designed to increase and conserve such resources. The Committee is responsible for the technical administration and operation of approved projects. Current hydrological investigations, designed to determine the extent of fresh water supply are being undertaken in conjunction with ground water investigations on the Island of Anguar. Recent invasions of the Trust Territory by pests which have seriously curtailed copra production, the main cash crop of the Trust Territory, have necessitated a rather extensive entomological program. The Committee also has plans for initiating a reforestation program.

The Welfare and Relief Committee is responsible for investigating conditions with respect to suffering caused by pestilence, famine, typhoon and other disasters in the Trust Territory and makes recommendations concerning the provision of food, clothing, and shelter and other essential services or financial assistance in lieu of such aid. Illustrative of the type of activity necessary in this field is the provision of food and clothing in the event of losses by typhoon such as occurred in the Marshall Islands last year. At times it is necessary to supply food and clothing by airplane to island areas which cannot be reached by surface transportation during stormy seasons of the year. Another important function is the development of welfare and recreation centers—a function which has not hitherto been carried on to the best advantage.

Statement of native travel fund June 30, 1952

BALANCE SHEET

Assets		*Amount*
Cash on deposit—Bishop National Bank		$907.34
Total assets		907.34
Liabilities and Capital		
Escrow deposits:		
Deposited by John J. Dennis for return of Miss Ropinsong to trust territory	$500.00	
Deposited by Jake Harshbarger for return of Felix Ramarui to trust territory	400.00	
		900.00
Interest earned on savings deposit		7.34
Total liabilities		907.34

NUMBER OF ISLANDS AND POPULATION

Mr. NORRELL. How many islands constitute what you call the trust territory?

Mr. MCCONNELL. It has been variously estimated, because some of them are pretty small to count, sir. They talk about 2,000 islands, of which 96 are populated islands.

Mr. NORRELL. About 2,000 all told?

Mr. MCCONNELL. Altogether, if you count every little dot out there in the water.

Mr. NORRELL. And the population of the total is how much?

Mr. MCCONNELL. Approximately 57,000.

LAW AND ORDER

Mr. NORRELL. Do you have much crime in the islands?

Mr. MCCONNELL. I would say compared to the United States we have a relatively low incidence of crime.

Mr. NORRELL. When you do, how do you handle that?

Mr. MCCONNELL. In each district there is a native constabulary under the general supervision of the one attorney that we have, who travels throughout the whole district. The constabulary is under the direct supervision of the district administrator in each district, but entirely managed by native people. The constabulary men are very good at following up on any criminal activity of their fellow Micronesians and putting them in jail.

They are brought to trial in the regular course of things by our district attorney who, as I say, travels to all the districts. They are defended by a very competent American lawyer, employed in our Internal Affairs Department, under the title of defense attorney. Sometimes we think he does too good a job, but it is all fair and square.

They are tried either before a district court of our so-called high court, where we have 2 judges, 2 American lawyers.

Mr. NORRELL. How many district courts do you have over there?

Mr. MCCONNELL. One in each district.

Mr. NORRELL. You will have to transfer the prisoner to the area where the district court is held?

Mr. McConnell. If it is a crime of enough seriousness to require it. There are local courts.

Mr. Norrell. Does he have jurisdiction over felonies? Where do you draw the line between the crime settled in the area where the crime is committed and those which have to go to your district court?

Mr. McConnell. I would have to refer to some other documents to give you an exact answer, but it depends upon the seriousness of the crime. If it is a misdemeanor it is handled in the local court, such as we would do in this country. If it is a more serious crime it is carried into a district court or further on into the so-called high court. The crime of murder, of course, is always tried in the high court.

We do have a code of laws which was recently promulgated, drawn together and put out under date of January 15 of this year. I would be happy to supply the committee with a copy of that code.

TAXES

Mr. Norrell. Do you have any system of collecting assessments or taxes or something from the local people to assist in carrying out their administration work?

Mr. McConnell. Yes, sir. They have municipal tax collections for their own municipal operations of their little communities. But aside from that we also assist them in collecting taxes which are due on a district basis.

Mr. Norrell. On the matters here, which you have embodied in your request before us, do they make any contribution to those?

Mr. McConnell. In the way of taxes against the copra is the most substantial way in which they make that contribution. That is collected at the time the copra is purchased. That is 15 percent.

Mr. Davis. The taxes on the copra are the principal source of income.

HOSPITALIZATION FEES

Mr. Norrell. When the people get hospital treatment do they pay anything for it?

Mr. McConnell. They pay a very small charge; yes, sir. It is a very nominal charge, but we do charge them something again so that they will not get the idea that things come free.

Mr. Norrell. What do you do with that money?

Mr. McConnell. That goes into these local collections, too, sir.

Mr. Norrell. Is that shown in your breakdown here?

Mr. McConnell. Yes, sir; under "Medical fees."

SCHOOLS

Mr. Norrell. Do they maintain any of their schools themselves?

Mr. McConnell. Yes, sir; they maintain their elementary schools.

Mr. Norrell. Where do we come in?

Mr. McConnell. We come in on the maintenance and operation of the intermediate schools, which are one step above the elementary schools. They maintain their elementary schools and pay their schoolteachers out of local taxes, most of them from cigarettes and things of that sort.

Mr. Norrell. Is there any effort to get us to continue to expand and take over more of the island work?

Mr. McConnell. No, sir: I think not. It is very happy I am that I can say that. I think that the general tendency of the people there is for greater independence, and they just want to be taught how they can maintain themselves.

Mr. Norrell. Are you encouraging that attitude?

Mr. McConnell. Yes, sir.

Mr. Norrell. I want to concur with you on that. Teach them to be independent rather than to be dependent.

Mr. McConnell. Might I make just this little remark with respect to that: One of our teachers in the islands wrote an article to be published in an educational journal in Hawaii not long ago, and came out under a caption which she did not put on it, "Teaching Micronesians To Be Americans."

As soon as we saw it both Dr. Gibson, the head of our Education Department, and I raised serious objections. We called the editor. We found out he was responsible for having put that caption on it. We asked if he had any objection to our writing to him and having something published on the subject, which he was kind enough to agree to do. What we finally suggested he should have used as a caption was "Teaching the Micronesians To Be Self-Sufficient".

In other words, we are not teaching them to be Americans.

Mr. Norrell. I am glad to hear that.

HOUSING FOR AMERICAN EMPLOYEES

I noticed your construction request for housing and other items, including your headquarters. On building the houses is it your idea to supply a house to each American employee? Where is that going to stop?

Mr. McConnell. We are trying in this to project the needs of housing for our American employees at about 4 years from now. In other words, it is a 4-year plan we have in mind. The number of houses we intend to build would be those that we feel would be necessary 4 years from now, with a somewhat reduced staff.

Mr. Norrell. Have you established a monthly rental for the American employees?

Mr. McConnell. Yes, sir. On the existing housing we have recently increased our rental to a minimum of $20 a month and running up to $50 a month for the existing housing.

So far as the new housing is concerned, I have just set rental values on that dependent on the size of the house, but with the idea of amortizing the cost over a period of 20 years. Therefore, a 3-room house, which is our standard for a married couple with some children, has a rental price which would be $75 a month.

Mr. Norrell. You never have had any idea that you might put a little more construction in there?

Mr. McConnell. Since we are spreading this over a period of 4 years, sir, we feel that any adjustments which need to be made could be made at the end, certainly of 3 years. As we go along if we find we are not going to need as much construction as anticipated at the time we are presenting this we certainly would reduce that figure in the third and fourth years.

Mr. Norrell. You do not plan, then, to use the housing as an additional income to the employees?

Mr. McConnell. No, sir.

Mr. Norrell. You know, we do not supply housing in this country to our employees.

Mr. McConnell. No, sir. We do not out there, sir.

PLANNED TRANSIENT HOTEL

Mr. Norrell. You have here a hotel in the headquarters area, with 20 rooms; is that right?

Mr. McConnell. Yes, sir; I believe it is 20 rooms.

Mr. Norrell. Twenty rooms for $90,000. Will you have need for that?

Mr. McConnell. We believe we will, sir. Among other things of course, with the planes and ships—particularly planes—calling at our various district centers, we have a plane crew of 4 or 5 men to take care of. We do have visitors constantly in the territory, and we must have some place to put those people up on a transient basis. We have people coming in from our districts to headquarters, for consultation, for meetings, and so forth. We feel that this is a rather conservative estimate as to need for rooms.

Mr. Davis. On that point, Mr. Chairman, I might mention that we now have a mission from the United Nations in the trust territories: a mission of 7 members with 1 or 2 staff people.

(Discussion off the record.)

HOUSING FOR MICRONESIANS

Mr. Norrell. Have you scheduled any housing for the Micronesians?

Mr. McConnell. We do have housing scheduled for those who will work at headquarters, who may be drawn in from other islands; yes, sir.

Mr. Norrell. Are you going to try to build houses for all the native employees?

Mr. McConnell. Not individual houses; no, sir. But, particularly for the nurses, for example, in the hospitals, we have to have housing. That is also true of any other Micronesian people in an administrative capacity, whom we have to draw in from outside areas into the island.

LEGISLATIVE AUTHORIZATIONS

Mr. Norrell. Do you have any congressional legislation regarding your expenditures over there?

Mr. McConnell. Mr. Davis answered that question with respect to our organic legislation. It has been presented, but has been returned to the Department for review by the Secretary and a presumed re-presentation to Congress.

Mr. Davis. The only legislation so far enacted has been the appropriation bills.

Mr. Norrell. I do not believe that a United Nations order or mandate would be sufficient for us to appropriate money. Neither would an Executive order, like a proclamation of the President. If a point of order were made would it have to be sustained on these items, Mr. Davis?

Mr. DAVIS. Well, there are extensive arguments on both sides of that question, Mr. Norrell. The committee last year, however, took the position in the report that it would not make another appropriation for the administration.

Mr. NORRELL. Has there been anything done since then?

Mr. DAVIS. We have again submitted the organic legislation. We cannot do more than ask Congress to go along.

Mr. NORRELL. Somebody ought to do a little bit more, because I do not think we can continue to do this unless we get a law.

Mr. DAVIS. We have every intention of trying to get action during the present session of Congress if it can be done.

Mr. SADY. Mr. Norrell, in connection with that there is a joint resolution of the Congress which approved the trusteeship agreement under which the United States has assumed full administrative jurisdiction in the trust territory.

Mr. DAVIS. That point, as you recall, was extensively debated in the committee last year. We are trying in every way to conform with the expressed wish of the committee.

Mr. NORRELL. Actually, though, you have not accomplished anything since you were here the last time; have you?

Mr. DAVIS. Not up to this moment, except to resubmit it.

COMPARING APPROPRIATION REQUESTS WITH THE HOUSE COMMITTEE REPORT

Mr. JENSEN. All right. Will you please insert in the record a table showing the amounts estimated for 1953 and 1954 compared with the specific items listed on page 23 of the 1953 House report. If funds are programed for any other items, list them separately.

Mr. MCCONNELL. Yes, sir; we would be happy to.

(The information is as follows:)

Comparison of 1953 appropriation and 1954 appropriation request with House committee report on 1953 appropriation request

	House report on 1953 appropriation request	1953 appropriation	1954 estimate
High Commissioner's office	$54,000	$58,904	$59,000
Judiciary	38,000	39,000	56,000
Grants:			
General administration	2,100,000	[1] 3,261,295	[1] 2,714,821
Legal and public safety	140,000	150,000	122,780
Agriculture assistant and land title work	195,000	480,000	541,518
Public health	624,500	681,550	755,350
Education	375,000	468,000	455,571
Public works	1,350,000	1,875,807	1,277,460
Subtotal, grants	4,784,500	6,916,652	5,867,500
Less estimated savings, Saipan		270,000	
Less local revenues		1,520,806	1,307,500
Adjusted subtotal, grants	4,784,500	5,125,846	4,560,000
Construction			3,825,000
Grand total	4,876,500	5,223,750	8,500,000

[1] Includes transportation and communication.

Mr. MCCONNELL. Thank you very much, Mr. Chairman.

Mr. JENSEN. Thank you for your testimony.

Alaska Public Works

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$7,000,000	$13,208,200	$15,000,000
Prior year balance available	4,037,550	7,965,155	
Total available for obligation	11,037,550	21,173,355	15,000,000
Balance available in subsequent year	−7,965,155		
Obligations incurred	3,072,395	21,173,355	15,000,000

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
1. Construction	$2,708,085	$20,519,355	$13,725,000
2. Advance planning			600,000
3. Administration	364,310	654,000	675,000
Obligations incurred	3,072,395	21,173,355	15,000,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	57	72	73
Full-time equivalent of all other positions	1	1	1
Average number of all employees	47	69	71
Average salaries and grades:			
General schedule grades:			
Average salary	$5,836	$5,557	$5,589
Average grade	GS-9.2	GS-8.6	GS-8.6
01 Personal services:			
Permanent positions	$248,707	$384,069	$396,551
Part-time and temporary positions	492	2,000	3,000
Regular pay in excess of 52-week base	1,127	1,763	1,823
Payment above basic rates	44,407	72,363	74,444
Total personal services	294,733	460,195	475,818
02 Travel	20,412	90,830	89,382
03 Transportation of things	11,467	20,000	20,800
04 Communication services	7,244	19,000	20,000
05 Rents and utility services	9,623	20,000	20,000
06 Printing and reproduction	3,278	10,000	12,000
07 Other contractual services	4,863	10,800	10,800
08 Supplies and materials	3,308	10,000	11,000
09 Equipment	9,340	13,000	15,000
10 Lands and structures	2,708,085	20,519,355	14,325,000
15 Taxes and assessments	42	175	200
Obligations incurred	3,072,395	21,173,355	15,000,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$200,211	$1,778,648	$12,952,003
Obligations incurred during the year	3,072,395	21,173,355	15,000,000
	3,272,606	22,952,003	27,952,003
Deduct unliquidated obligations, end of year	1,778,648	12,952,003	11,952,003
Total expenditures	1,493,958	10,000,000	16,000,000
Expenditures are distributed as follows:			
Out of current authorizations	1,493,958	4,000,000	7,000,000
Out of prior authorizations		6,000,000	9,000,000

Mr. JENSEN. Mr. Wheeler, you are the Assistant Director of the Office of Territories?

Mr. WHEELER. Yes, sir.

Mr. JENSEN. Do you have a statement that you would like to make on the item of "Alaska public works"?

Mr. WHEELER. I have no prepared, written statement, Mr. Chairman. I would like to make a few observations, if I may.

Mr. JENSEN. All right. Before you do that, I am happy to have sitting beside me today Congressman Westland of the great State of Washington who has requested that he sit in on these hearings because of his interest in matters which will be brought up at this time.

All right, Mr. Wheeler.

GENERAL STATEMENT

Mr. WHEELER. This program of Alaska public works was instituted by Public Law 264, which was enacted by the 81st Congress, and which authorized an appropriation of $70 million for a program which made eligible for projects any public body in Alaska with the provision that the project would be constructed by the Federal Government and upon its completion sold to the applicant public body at from 25 to 75 percent of the cost, and with the further provision that approximately 50 percent of the total cost of projects constructed would be collected from the applicants and covered into the miscellaneous receipts of the Treasury of the United States.

This is an estimate for the fifth appropriation under the act.

There has been appropriated up to now $29,208,200, and the request before you is for $15,000,000 of which $13,725,000 would be for construction, $600,000 would be for planning in advance for projects, and the remainder for administration costs.

1954 PROGRAM

Now, the $13,725,000 would be distributed, according to our plan, as follows: $5,836,000 for schools; $800,000 for other buildings; $5,747,000 for water systems and sewer systems and streets, but mostly for water and sewer, and $1,322,000 for another piece of that waterfront street in Ketchikan.

The need, I think, for these projects is very well known to the committee.

SCHOOLS

The school authorities in Alaska, for example, estimate that by 1960—from now until 1960—there should be expended something like $30 million for schools.

Mr. JENSEN. Who made that estimate?

Mr. WHEELER. I think that is the estimate of the Territorial school authorities, is that right, Mr. Wilson?

Mr. WILSON. That is correct.

Mr. JENSEN. For whoever has to pay?

Mr. WHEELER. For whoever pays. That is not under this program necessarily, but to satisfy the school needs throughout the Territory exclusive of native schools under the Indian Service, and the cost in their estimate is $30 million.

We have, as I say, here in this estimate $5,836,000, of which $635,000 would be for Territorial schools and the remainder of that amount for schools of the municipalities who are applicants under the act.

HOUSING

Another very important item in Alaska is the production of housing, and while we do not construct housing we do service housing projects through the installation of utilities, and that installation cost, like any other project cost under this act, would be shared by the municipality, or by the Alaska Housing Authority, whichever might be the applicant.

In this program that we are presenting today there are three housing projects. One of them which is of great importance, is the one at Ketchikan because of the installation there of that pulp mill which involves an investment of private money to the extent of about $46 million, and I think the housing that is privately financed also is to cost about $5 million, and will provide 80 dual-family units and 320 single-family units. The utilities will cost in the neighborhood of $500,000.

PROGRAM PROGRESS

Mr. WHEELER. I might tell you what the progress on the past program has been. We have already collected from applicants in the neighborhood of $200,000 and covered it into the Treasury.

Of the 61 projects allotted we have 30 finished. We have made some cash collections on 7 of them, and on the rest we will probably begin collecting between now and the 30th of June. Certainly between now and the end of October we will have collected something on all of them.

Mr. JENSEN. Do you have that information there in brief form, suitable to put in the record?

Mr. WHEELER. No, but I can very quickly make it up and send it over to you.

(The matter referred to follows:)

PROGRESS ON ALASKA PUBLIC WORKS PROGRAM

Collections made to date

Project No.	Public body	Project	Total cost	Amount repaid United States	Type of payment
41	Juneau	Sewer and street improvements.	$23,544.18	$11,772.09	Entire purchase price.
27	Ketchikan	Storm and sanitary sewers.	569,668.44	834.22	Initial payment only.
				15,345.03	First annual payment with interest.
6	Wrangell	School additions	371,500.00	40,500.00	Advance partial payment.
56	Anchorage	Street improvements	231,425.08	12,612.66	Initial payment only.
2	Skagway	Water and sewer systems.	95,477.28	2,738.64	Do.
12	Territory of Alaska	Nunlichik School	206,815.15	103,407.58	Entire purchase price.
10	do	Chugiak School	57,667.81	28,833.91	Do.
	Total			216,044.13	

Projects completed

Appropriation year	Total number of projects	Projects completed	
		Number	Cost
1950	19	18	$4,867,146
1951	12	6	2,663,200
1952	15	5	1,505,600
1953	15	1	565,300
Totals	61	30	[1] 9,601,246

[1] Of this amount, applicants on 11 of the 30 projects will repay in a lump sum $1,767,000, the full 50 percent of the cost. Those on which such payments have already been made appear in the list above with notation in last column "entire purchase price."

Mr. JENSEN. We will also put page 128 of the justifications in the record which shows the projects for which you are asking $13,725,000 in the fiscal year 1954 budget request. Please show any revisions which have been proposed by the Secretary to the Bureau of the Budget

(The matter referred to follows:)

Program for fiscal year 1954

Applicant	Type of project	Amount recommended for allotment, fiscal year 1954	
		Original	Revised
Alaska Housing Authority—Turn-again Homes (near Anchorage).	Utilities	$752,200	$752,200
Alaska Housing Authority—Lloyd Homes (adjacent Ketchikan).	do	497,600	497,600
Alaska Housing Authority, anticipated application.		420,100	420,100
Kodiak Independent School District	High school	600,000	600,000
Territory of Alaska:			
Ruby	School	150,500	
Fort Yukon	do	465,000	
City of Cordova	do	675,000	675,000
Territory of Alaska	Health centers	200,000	135,000
Anchorage Independent School District	School	1,102,000	1,102,000
City of Ketchikan	Waterfront arterial addition	1,322,000	1,322,000
City of Fairbanks	Water and sewer	2,000,000	2,000,000
Fairbanks Independent School District	School	600,000	
City of Juneau	Street improvements	200,000	
City of Sitka	School addition	662,000	662,000
Territory of Alaska, University	Utilities	597,500	597,500
Do	Food service building	600,000	600,000
City of Valdez	Water system	528,000	528,000
City of Seward	High school	725,000	725,000
City of Petersburg	Water, streets, sewer	771,100	701,600
City of Skagway	School addition	270,000	270,000
Fairbanks Independent School District	do	587,000	587,000
Total construction		13,725,000	12,175,000
	Advance planning	600,000	200,000
	Administrative	675,000	625,000
	Grand total	15,000,000	13,000,000

RECOMMENDED REDUCTION IN THE REVISED BUDGET

Mr. JENSEN. Do you have any information at this time as to whether or not the revised Truman budget has changed your project figures in any way?

Mr. NUCKER. There has been recommended a reduction of $2 million in this item in the Alaska public works item.

Mr. JENSEN. It was simply a $2 million reduction in the total I presume?

Mr. NUCKER. Yes, sir. But we will show the distribution of the reduction in the revised list which you have asked to have inserted into the record.

Mr. JENSEN. Yes, sir. Of course, we may even change that.

Mr. NUCKER. Yes, sir.

RECOMMENDED REVISIONS OF OTHER ITEMS FOR ALASKA

Mr. JENSEN. Is there any other place where a revision has been made in the Truman budget?

Mr. NUCKER. Yes, sir, recommended by the Department.

Mr. JENSEN. Will you give us a list of those at this time?

Mr. NUCKER. Yes, sir; we will do that.

Mr. JENSEN. Give us a list of the Alaska items.

Mr. NUCKER. On the Alaska Road Commission, $1 million; the Alaska Railroad, $13 million.

Mr. JENSEN. Is that the item for the rehabilitation of the railroad from Seward to Portage?

Mr. NUCKER. Yes, sir, and the dock at Seward.

Mr. JENSEN. Did the revised budget recommend any repair whatever for the dock at Seward?

Mr. NUCKER. No, sir. The reduction is $13,214,000.

Mr. JENSEN. Are there any others?

Mr. NUCKER. No, sir, only in Public Works, Alaska Railroad, and Alaska Road Commission.

MUNICIPAL PARTICIPATION IN THE PROGRAM

Mr. JENSEN. Have these different municipalities passed the required resolutions which qualify them for this 50-percent assistance from the Federal Government?

Mr. WHEELER. Yes, sir. They have all presented applications and in all but 2 instances where an election is required, it has been held, and in those 2 instances where it has not been held, it will be held this month or this spring.

Mr. JENSEN. You will spend no money there until the provisions of the law have been met?

Mr. WHEELER. Every one, except two.

Mr. JENSEN. What two are they?

Mr. WHEELER. The street-improvement program in the city of Juneau is one of them, and the Kodiak High School election has not been held yet, or at least, it was not when this was made up.

Mr. WILSON. No, I have the reports and it has not been held.

Mr. WHEELER. Those are the two. Juneau streets and Kodiak High School.

Mr. JENSEN. If that is not right, will you supply it for the record.

Mr. WHEELER. Yes, sir, I will, but I am quite sure it is.[1]

Mr. JENSEN. How much money is yet to be appropriated out of authorized funds?

Mr. WHEELER. $40,791,800. That is the difference between $70 million and $29 million plus.

[1] A later check shows that the Kodiak election was held in 1951.

Mr. JENSEN. $29,208,200?

Mr. WHEELER. Right.

Mr. JENSEN. Do you anticipate you will need all that money?

Mr. WHEELER. We could use it all, Mr. Chairman; I am certain of it.

Mr. JENSEN. Well, you can spend it all; I have no question about that.

Mr. WHEELER. We already have in our hands applications sufficient to take up the total of that amount.

Mr. JENSEN. But, can you spend it properly?

Mr. WHEELER. I think we could spend it for only needed things on the basis of 50-percent participation.

Mr. JENSEN. Are you scrutinizing all of these applications from this point of view: Can the people there or can the Territorial legislature assist in this program and are you investigating every avenue where you might possibly relieve the Federal Government of this great expenditure and still get the work done that absolutely must be done under present conditions?

Mr. WHEELER. Well, we are certain that the municipalities are in need of more things than at any given time they are able to provide for.

Mr. JENSEN. Of course, everyone says that.

Mr. WHEELER. It is so, Mr. Chairman, in Alaska. Of course, it is so in the States, too, that in some places school children are on a part-time basis in attendance and doubling up, but there are facilities being used up there that are not really fit for school purposes and we think that the municipalities and the Territorial government are putting up at any given time about what they are capable of putting up. Of course, under this program, they are getting twice as much for the expenditure they make as they would get if they were providing the whole thing themselves, but we are making sure that they are able to finance their share of anything that we do, by an examination of their assessed valuation and their taxation practices and other fiscal factors. A number of the municipalities have enacted a sales tax for this particular purpose and some of the projects are revenue-producing projects and those revenues are pledged, together with the full faith and credit of the municipality as additional security. We feel that we are supplying only needs and we are not building anything with any frills or furbelows that could be said to be extravagant. There is not any of that.

ADVANCED PLANNING

Mr. JENSEN. You are asking for $600,000 for advance planning. Do these affected municipalities assist in planning for these projects to such a degree that we might relieve the Federal Government of some of this planning, or do you go up there and say, "All right, this is what you need and this is what you are going to get, whether you like it or not?"

Just how do you handle it? Do you find out what the towns want and then act accordingly and do you work with the town councils and with the Territorial legislature and the Governor?

Mr. WHEELER. We work with all of the municipal and Territorial officials and with the school district officials, the public utility district officials, where they are involved. The desires of the public bodies are first expressed through those officials by the submission of an application. If a town needs more than one thing, and most of them do, those officials express their own preference. If they have three projects, they may want a school before they want something else, or they may want a waterworks before they want something else. In any event, their expressed preference is given full consideration by us. We work with them all the time. Then the will of the municipality itself—the population of the municipality or of the school district—their will is expressed in an election, where an election is required, and remarkably few of them fail.

In other words, the people want the things that they are being taxed to get and a number of them, in support of the program, have enacted sales-tax laws. There are taxes on tobacco being collected by the Territorial officials and rebated back to the public bodies in accordance with a formula, and that money is available for financing schools in this program. They are certainly not having anything foisted on them. We are only able to meet a modicum of the things that they themselves come to us and say they need very badly.

MUNICIPALITIES ABILITY TO PAY

Mr. JENSEN. I presume you have asked all these different municipalities if they could not issue municipal bonds and pay for this job themselves. Do you find that out before you put them on the list and approve their projects? Do you find out if these towns are able to pay their own way?

Mr. WHEELER. Yes, sir. We find out, Mr. Chairman, what their ability is. The basic law, Public Law 264, says that these projects may be financed by the Federal Government to the extent of available appropriations on the basis that I have explained, regardless of other indebtedness of the public bodies. If they have a bonding ceiling by other law, that is not applicable under this law, but that does not mean we go in and disregard what their bonded indebtedness is and what their ability to pay is. We go into that very carefully and we do it with one of the best finance men in the country, whom you know, Mr. Ben Thoron.

At last year's hearing we submitted a statement by him of the ability of all of the municipalities in Alaska to sell their bonds in the private market. There are only 3 or 4 municipalities in the Territory that could find such a market, and if they were doing that for the full cost of the project, they would be bound by any ceiling that may have been set by any law on their ability to bond.

CONTRACT BIDS

Mr. JENSEN. I presume all of these contracts are let to the lowest responsible bidder?

Mr. WHEELER. Yes, sir.

Mr. JENSEN. How many bids do you generally get on a contract?

Mr. WHEELER. It depends on where the project is and what kind it is, but we get anywhere from—I do not think we have ever had a single bidder, and we get from 2 or 3 up to 6. I do not suppose we ever get more than six.

Mr. WILSON. We have gotten up to seven.

Mr. JENSEN. Are they local contractors? I mean by that, contracting firms who are located in Alaska, or do you get most bids from the mainland?

Mr. WHEELER. Both. Some of them are local people and some of them are mainland contractors. I think some of the mainland contractors have probably established in Alaska, not subsidiaries, but divisions of their firm and that division of their company does all its Alaskan work. I do not know how many that may be true of, but I think it is true of several, and several of the big ones.

UNOBLIGATED BALANCE

Mr. JENSEN. What is the unobligated balance of appropriated funds as of June 30, 1952?

Mr. WHEELER. Can you, Mr. Nucker, answer this question on unobligated appropriated funds as of June 30, 1952?

Mr. NUCKER. Not as of June 30, 1952, but I have a figure as of December 31.

Mr. JENSEN. All right, let us have that.

Mr. NUCKER. You wanted the unexpended balance or unobligated balance of funds?

Mr. JENSEN. Unobligated and unexpended, both.

Mr. NUCKER. I have an unexpended balance as of December 31, 1952, Alaska Public Works, $18,060,279.15.

Mr. JENSEN. Now, your unobligated balance.

Mr. NUCKER. The unobligated balance—it is approximately $13 million. I will verify that for the record.

(The matter referred to is as follows:)

The unobligated balance as of December 31, 1952, was $14,120,771.

Mr. JENSEN. What do you estimate your unobligated balance will be as of June 30, 1953?

Mr. NUCKER. Congressman Jensen, I have been out of the office this week and have not seen those figures.

Mr. JENSEN. Will you put them in the record?

Mr. NUCKER. I will be glad to get them; they are available, I know.

(The material referred to follows:)

The unobligated balance as of June 30, 1953, for Alaska public works is estimated at $75,000.

ADMINISTRATION

Mr. JENSEN. You are asking for $21,000 more than in 1953 for administrative funds.

Mr. WHEELER. Yes, sir. On this revision of $13 million—you see this is a $15 million estimate and now $2 million has been cut off.

Figuring a reduction on that basis, the request for administrative expenses can be reduced at the rate of $21,000 per million, which is $42,000 less than we have asked. So, at $675,000, if you give us $13 million of that total amount, instead of $675,000, it should be $633,000 for administrative funds.

Mr. JENSEN. What is the least you think you can get along with? You might just as well start trimming your sails, because if you leave it to us, we are likely to give you a cut that will really hurt.

Mr. WHEELER. I am very earnestly asking the committee not to go below $625,000, and every nickel of it that can be saved will go into a project. We will not just spend this $675,000 if we do not need it.

Mr. JENSEN. I hope you will not.

Mr. WHEELER. Well, we will not. Each project we start has to be inspected, and we cannot tell to a gnat's whisker what it will be, but I am earnestly asking you not to go below $625,000 out of $13 million for administrative expenses.

Mr. JENSEN. How much did you spend this year for administrative expenses?

Mr. WHEELER. I think it will wind up at $599,000, but we are going to advertise a number of projects this month and next month and those projects will require inspectors and only a few of the inspectors can be moved over from finished projects to those new projects.

There is one thing I am certain of, and that is there has not been a penny of what we have had wasted, and I mean a penny.

I am satisfied that you can go to any part of these installations, and you will find no idleness and no unnecessary work being done. You will find plenty of overtime being done, and I will be satisfied to have you make that inquiry any time, Mr. Chairman. That is why I say I earnestly request you not to go below $625,000.

Mr. NUCKER. The unobligated balance which you requested for June 30, 1952, is $7,965,155, as of June 30, 1952, and I will have to supply the forecast, as you suggested.

Mr. WHEELER. I would like to insert in that last remark of mine when I said "overtime," I should have said "gratis overtime" and not remunerated overtime. So, there is not any expenditure for overtime.

Mr. JENSEN. Of course, they all get a 25-percent differential for working in Alaska; do they not?

Mr. WHEELER. That is right.

Mr. JENSEN. They are not suffering too much, are they?

Mr. WHEELER. Well, they are puttng in a good day's work, Mr. Chairman. I am really earnest about that.

Mr. JENSEN. I hope you are right.

PROJECT CONSTRUCTION SCHEDULE

Mr. NORRELL. Just a little about the projects that we appropriated for in the last fiscal year. Have you started all of those projects? Are they under construction now?

Mr. WHEELER. No, sir; there are 2 on the list under construction and 1 of those was for utilities and a housing project in Anchorage and

that was completed. It was started and completed in the last construction season. It was utilities to a 250-unit housing development. The other one that we started was the renovation of health centers and there were 4 of them and 3 of them have been completed and the fourth one is just getting under way.

Mr. NORRELL. You mentioned three that had been completed. Let me check that on the justifications.

Mr. WHEELER. One of the items is the renovation of 4 different health centers, and 3 of them are completed, and 1 of them is getting under way now.

Mr. NORRELL. Which one is that?

Mr. WHEELER. That is the last one listed there.

Mr. NORRELL. What about the others now?

Mr. WHEELER. The others will all be advertised this month, or next, depending on where they are located and when the construction season opens.

CONSTRUCTION DELAY

Mr. NORRELL. What has occasioned the delay on these projects?

Mr. WHEELER. Well, the preparation of plans. After the appropriation and the money is available, it has been necessary in most instances to make plans and by the time the money is available and the plans are made, the construction season in Alaska has so far advanced that it is impractical to let the projects for that construction season. We have let out for bids projects late in the season, and we know that they could not be constructed or completed during that season, and we have felt that those who bid on some of those projects were bidding higher than they would if they had bid at the beginning of a construction season, and, so, we have not let contracts where we had that feeling. Really, the reason we are asking for advanced planning here is that we would plan next year's program, and we would get the plans for next year's program ready this year so that the projects we had planned could take advantage of the opening of the construction season.

Mr. NORRELL. I certainly want to commend you for not executing contracts until you reach the opportune time to do that and not let the contractor hold you up.

Mr. WHEELER. I think in one or two instances where we advertised for bids late, we felt that the bids that were received were just not as good as we would get if we waited until the opening of the next season, so we threw out all the bids and waited.

MUNICIPAL PARTICIPATION

Mr. NORRELL. Have the local municipalities raised their part of the money for the rest of these projects here?

Mr. WHEELER. The Territorial applicants? Where the Territory itself is the applicant, those projects would be financed only if the money had already been appropriated by the Territory.

Mr. NORRELL. They have to raise their part of the money, or at least they are supposed to?

Mr. WHEELER. That is right.

Mr. NORRELL. Have they actually borrowed their part of the money on the projects since the money was appropriated here last year?

Mr. WHEELER. Yes; on all those projects, they have.

Mr. NORRELL. Did they borrow from the United States or from some private individual?

Mr. WHEELER. Not from the United States. It came from locally raised revenues and appropriations by the Territorial legislature on Territorial projects.

Mr. NORRELL. They have actually borrowed their percentage of the construction cost?

Mr. WHEELER. They have actually gotten it somewhere. I think it would be by local revenues and by appropriations of the legislature where the Territory itself is the applicant.

Mr. NORRELL. What I am trying to get at is that they have raised their part of the money?

Mr. WHEELER. They have raised their money; yes, sir.

Mr. NORRELL. I remember last year and the years before, we have had quite an argument about when you should ask us for appropriations, and I have always thought you should have all the preliminaries completed, such as a municipality deciding on what it wants and voting the bond issue and making plans and specifications and have their part of the money raised; then come to us for the United States' share, and I think there would be no argument about that.

On all of these projects, has that been done, or what has been done locally regarding these projects up to this time?

Mr. WHEELER. On all but two of them where an election is necessary, the election has been held.

Mr. NORRELL. Will you describe what two those are?

Mr. WHEELER. One is the Juneau street improvement. That election has not been held and the other is that Kodiak Independent School District, and we think those elections will be held this month, or next.[1]

Mr. NORRELL. Now, in Juneau, that is a $200,000 item, is it not?

Mr. WHEELER. Yes, sir.

Mr. NORRELL. What is the other item?

Mr. WHEELER. Kodiak. That is the fourth item down and it is $600,000.

Mr. NORRELL. And the others have done everything that we indicated last year they should do before the money would be spent?

Mr. WHEELER. They do not have their plans ready, Mr. Norrell. They have some of their planning done in the way of their preliminary surveys and, in some cases, their preliminary drawings, but the detailed drawings are yet to be done on these, as there were on a number of projects last year.

PROPOSED PROGRAM

Mr. NORRELL. In order to conclude this matter, suppose I ask you to insert in the record the status of each one of these projects. I believe you did that last year.

Mr. WHEELER. All right, sir.

[1] NOTE.—Election has been held.

(The material referred to follows:)

Proposed 1954 program, Alaska public works

50–A–163—Alaska Housing Authority Turnagain Heights near Anchorage, water system and street improvements $752, 200

(*a*) The Turnagain Heights area, which is near Anchorage and within the area called Greater Anchorage, designated as defense areas, does not at present have any water system.

(*b*) The Alaska Housing Authority has submitted preliminary plans, and final plans and specifications are being prepared. No election is required.

(*c*) Applicant proposes to pay for the project either from the cash realized upon the sale of individual units or from the rentals of the units over a period of 20 years.

50–A–180—Alaska Housing Authority, Lloyd Homes, adjacent Ketchikan, water system and street improvements $497, 600

(*a*) The Lloyd Homes Flat does not have any water or sewer system and no improved streets. However, the city of Ketchikan is arranging to provide a water supply to the area by extending the city's water-supply mains. The United States Coast Guard maintains a base in Ketchikan and, in addition, there is a component of the Army Signal Corps. A $40,000,000 pulp plant is now under construction, and has created a relatively large impact in the general area.

(*b*) The Alaska Housing Authority has submitted preliminary plans, and final plans are being prepared. No election is required.

(*c*) Applicant proposes to pay for a half share of the project over a period of 20 years, with funds obtained from the sale of individual units or with revenues derived from rentals.

50–A–Unnumbered—City of Fairbanks, Grandview Homes, Alaska Housing Authority; Parkway Homes (near Anchorage), Alaska Housing Authority; Anchor Park (near Anchorage), water, sewer, and street improvements for housing projects $420, 100

(*a*) The funds requested will contribute toward the installation of water systems, sewer systems, and street improvements in areas which are selected by sponsors of housing projects working in conjunction with the municipalities or the Alaska Housing Authority. The sponsors are negotiating with the Federal Housing Administration.

(*b*) Plans are being prepared for the Alaska Housing Authority's projects. No election is required.

(*c*) Applicant proposes that 50 percent of the cost will be derived from funds obtained from the sale of individual units or with revenues derived from rentals.

50–A–45—Kodiak Independent School District, high school $600, 000

(*a*) This project would include the construction and equipping of a one-story masonry and mill constructed high-school building containing six standard classrooms, a chemistry laboratory, manual training shop, administrative offices, and the usual services. It would adjoin the present grade school, project 50–A–96, and gymnasium, project 50–A–135, now under construction. It would afford the nearby naval base and the community one complete school plant, provide economical administration for the district, and give this community the proper facilities which it so sorely needs and never has had.

(*b*) Preliminary plans have been made but will require some minor alterations. Working drawings and specifications will require 150 days for completion. The election has been held.

(*c*) The applicant's 50 percent of the cost will be paid with revenues from the Territorial tobacco tax and from funds appropriated by the Territorial legislature. General obligation bonds will be pledged.

50–A–161—City of Cordova, grade school $675, 000

(*a*) Present school facilities are old, held in several locations, and totally inadequate; in no way do they meet minimum requirements for health or safety. Some of the structures used for school purposes are of frame, erected in 1913. The present total enrollment is 260, and increasing. The need exists for modern, economical facilities. In order to provide these and consolidate the school

facilities for practical and economical purposes, it is proposed to construct a 2-story, 9-classroom grade-school building, which also includes a playshed, multipurpose room, and the other usual services.

(*b*) Preliminary plans are completed and final plans are being prepared. These can be completed within 60 days after funds become available. Election has been held.

(*c*) Applicant will reimburse the United States for 50 percent of the project cost from funds derived from the Territorial tobacco tax, the general fund, and funds appropriated therefor by the Territorial legislature. General obligation bonds will be pledged.

50–A–168—Territory of Alaska, health centers $135, 000

(*a*) Provide health-center facilities in Kake, Homer, Wasilla, Dillingham, and Bethel where no such facilities exist, also renovate and construct a small addition to the existing health center at Kodiak. The need for these is obvious and urgent and the request for them has been made directly by the Territorial Commissioner of Health for Alaska.

(*b*) Preliminary plans are completed. Final plans will require 60 days for completion. No election is necessary.

(*c*) The applicant will provide 50 percent of the project cost from funds appropriated by the Territorial legislature.

50–A–140—Anchorage Independent School District, elementary school $1, 102, 000

(*a*) An unprecedented growth continues within this Independent School District, which includes Alaska's greatest military-impact area. The new schools and school additions which have been provided during the last few years are inadequate to take care of present requirements.

(*b*) Preliminary plans are complete and final plans can be provided within 120 days following availability of funds. The election has been held.

(*c*) The district will pledge its full faith and credit secured by a pledge of general obligation bonds. Revenues from the Territorial tobacco tax, which is earmarked for school construction and funds appropriated by the Territorial legislature, will provide for the applicant's half share of the project's cost.

50–A–164—City of Ketchikan, waterfront arterial addition $1, 322, 000

(*a*) This is an extension of the construction under project 50–A–137. The completion of the waterfront arterial is the most essential need of the city, as the existing arterial is a serious bottleneck to traffic, and a potential hazard until it is replaced with an adequate and permanent fireproof structure. Important portions of the existing arterial are on wooden trestles.

(*b*) Final plans can be provided in 120 days. The election has been held.

(*c*) The city will pledge the receipts from a sales tax and 20-year full faith and credit bonds of the city will be pledged.

50–A–169—City of Fairbanks, water and sewer system $2, 000, 000

(*a*) A water supply plant is under construction in Fairbanks, but will not be effective without a distribution system. The existing distribution system is limited to the business section of the city, with no service to residential areas. Fairbanks is considered as a military impact or defense area.

(*b*) Preliminary plans are underway. Final plans can be completed in 180 days. The election has been held.

(*c*) The city will pledge the revenues from the water system. General obligation bonds will be pledged.

50–A–138—City of Sitka, school addition $662, 000

(*a*) This proposed masonry and mill constructed addition enlarges the usable section now under construction (APW project 50–A–51). This addition consists of 7 classrooms, library, multiservice room and the usual services; all on 1 floor. It is necessary, in order to provide adequate school facilities, to consolidate their operations. Many classes are now held in substandard buildings and in scattered locations.

(*b*) Preliminary plans are completed. Final plans will require 150 days after funds become available. The election has been held.

(c) Revenues from the Territorial tobacco tax and funds appropriated by the Territorial legislature will provide payment for the applicant's half share of the project's cost. General obligation bonds will be pledged.

50–A–147—Territory of Alaska, university utilities $597,500

(a) The physical expansion of the University has been handicapped for lack of basic utilities to serve existing and new structures. This project will provide utilidors along with the necessary sewer, water, and electric lines

(b) Master plans are on hand and final plans can be provided in 150 days. No election is required.

(c) The applicant's half share of the project cost will be paid in cash from funds appropriated by the Territorial legislature.

50–A–149—Territory of Alaska, university food service building $600,000

(a) Provide a 2-story reinforced concrete building to consolidate the inadequate food service facilities now on the campus. This building will eliminate the use of two old shacks which need to be demolished to eliminate the ever-present fire hazard.

(b) Preliminary plans have been made. Final plans will be completed with advance planning funds. No election is required.

(c) Fifty percent of the project cost will be paid from funds appropriated by the Territorial legislature.

50–A–150—City of Valdez, water system $528,000

(a) It has been determined that a water system is the most essential need of the city, and that the planning and construction of other public improvements are being handicapped and delayed for lack of a public water supply.

(b) Prelminary plans are on hand, and final plans can be completed in 150 days. The election has been held.

(c) Fifty percent of the project cost will be paid from revenues of the system. General obligation bonds will be pledged.

50–A–160—City of Seward, high school $725,000

(a) Present building serves both elementary and high school pupils, space in 3 church basements and 1 lodge room also being used. Four hundred and fifty children presently enrolled and increasing at rate of 10 to 15 percent annually with no additional satisfactory space available in town for future additional classroom needs.

(b) Preliminary plans have been completed. Final plans and specifications will be completed after receiving allotment. The election has been held.

(c) The city will pledge its full faith and credit secured by a pledge of general obligation bonds.

50–A–19—City of Petersburg, water, streets, and sewers $701,600

(a) The streets in Petersburg are on timber trestles in many places. These are in such condition that constant and costly repairs are necessary. It is proposed to construct more permanent structures, and to rehabilitate and extend the water and sewer systems to allow an orderly growth of the city.

(b) Preliminary plans are in preparation and final plans can be completed in 180 days. The election has been held.

(c) Payment of the applicant's half share will be from the general fund. General obligation bonds will be pledged.

50–A–100—City of Skagway, school addition $270,000

(a) The increase in school population of this area has made the existing facility inadequate. It is proposed to construct a 2-story reinforced concrete addition and make necessary alterations and repairs to the existing structure. This addition, besides providing the needed classrooms, will include a manual training shop in the basement. The shop is now in an old Army building, but because it cannot be properly heated, cannot be used during the winter months.

(b) Preliminary plans have been prepared. Final plans will require approximately 100 days. The election has been held.

(c) Fifty percent of the project cost will be paid with revenues from the Territorial tobacco tax and from funds appropriated by the Territorial legislature. General obligation bonds will be pledged.

50–A–165—Fairbanks Independent School District, school addition ... $587,000

(*a*) In attempting to expand this district's school facilities, brought about by the increased enrollment in this defense area, it is necessary to construct and equip a 14-classroom addition to the new Fairbanks Grade School (APW project Aaa 50–A–3). It should be noted that these can be served from the central facilities constructed in the original school. Their addition can also be made with a minimum of alteration to the existing structure, and their need is one of the most urgent in the Territory today.

(*b*) Preliminary plans are completed. Final plans are being drafted and can be available within a very short time after an allocation of funds is received. The election has been held.

(*c*) The applicant's 50 percent of the cost will be paid with revenues from the Territorial tobacco tax and from funds appropriated by the Territorial legislature. General obligation bonds will be pledged.

THE KETCHIKAN CITY WATER FRONT PROJECT

Mr. JENSEN. Mr. Wheeler, your item for the Ketchikan City water front is $1,322,000. That is one of the large items, and I understand in talking with Congressman Westland of the State of Washington, who is present with us this afternoon, that that item is of great concern to the wood-pulp plant.

Mr. WHEELER. Yes, sir.

Mr. JENSEN. That is the wood-pulp plant that is located there.

Mr. WHEELER. Yes, sir; it is.

Mr. JENSEN. Mr. Westland is interested in that project and has told me the main reason he is interested in that is because this pulp wood plant represented private capital.

Mr. WHEELER. That is right.

Mr. JENSEN. That is private capital going to Alaska and taking the risk.

Mr. WHEELER. Yes, sir.

Mr. JENSEN. How much money do they plan to spend?

Mr. WHEELER. I think when they have completed the construction of the plant and furnished the equipment, it will be $46 million, and on top of that you have this $5 million of private money going in there for a housing project, for which they have asked us to furnish the utilities and those utilities will cost a half million dollars. We feel that whatever can be done, in a reasonable way, to encourage private investment in Alaska and that as a long-range program, it will reduce the amount of Federal money that will have to go in there. Anything that can be done to encourage that sort of investment, we believe is very much worthwhile.

Mr. JENSEN. Well, of course, the truth of the matter is, until we can get enough private capital operating in Alaska, Alaska certainly cannot get on its feet and be self-supporting, and we know that.

Mr. WHEELER. There is another feature to that.

Mr. JENSEN. Tell us in your own words just how this program will inure to assist in helping to get this pulp mill going.

Mr. WHEELER. Ketchikan is built like that [indicating], Mr. Chairman, and the mountains go up from the shore and there is only a very narrow place for development. In Ketchikan they have built this waterfront arterial street on piles.

Mr. JENSEN. I have seen it; I have been there.

Mr. WHEELER. It has a wood plank surface and that wood-plank surface is costing in the neighborhood of $40,000 a year for maintenance only. With the advent of the pulp mill, which will be some distance out of town, and the additional traffic that it will bring into Ketchikan itself, this street is just going to be entirely inadequate to handle the traffic. They are willing to put up their share to participate in a program to build a new street. Where it is not on solid ground, it will be handled by trestles or bridges or whatnot, but it will do away with this wood-plank street and will save about $40,000 a year in maintenance, or it will save some part of it—a good part of it for other municipal purposes. We believe it will tend to stabilize the population that this mill will attract, when they have municipal services of something of the character that they are accustomed to down here.

Mr. JENSEN. And if the pulp mill makes a success of it, which I am sure they will, then this expenditure of Federal funds will also assist other industries that might spring up in Ketchikan?

Mr. WHEELER. Well, yes. I think that the installation of that pulp mill will attract a number of other commercial activities, and there will have to be service activities and whatnot to service the new population that comes in. It is estimated that around 5,000 new people will come into Ketchikan as a result of the mill and the service agencies that will follow.

Mr. JENSEN. We are not spending any money out of this fund for housing workers at the mill, are we?

Mr. WHEELER. No, sir; we have no authority for that, unless the municipality became an applicant, Mr. Chairman, for housing, which they have not in this instance.

Mr. JENSEN. I would not anticipate that they would.

Mr. WHEELER. No; this is a private housing deal.

Mr. JENSEN. The payroll for these employees is going to be such that they can finance their own homes.

Mr. WHEELER. We are not spending any of this money for housing.

ALASKA ROADS COMMISSION

CONSTRUCTION OF ROADS, ALASKA

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$12,000,000	$17,000,000	$18,400,000
Prior year balance available	4,235,768	744,944	
Available from subsequent year appropriation (48 U. S. C. 326)	1,549,292	1,500,000	1,500,000
Available in prior year (48 U. S. C. 326)	−1,314,050	−1,549,292	−1,500,000
Returned from Department of the Army	226		
Reimbursements from other accounts	1,005,448	1,000,000	1,000,000
Total available for obligation	17,476,684	18,695,652	19,400,000
Balance available in subsequent year	−744,944		
Obligations incurred	16,731,740	18,695,652	19,400,000

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
1. Preparation of plans	$277,050	$322,950	$550,000
2. Construction in progress	13,216,406	14,462,702	15,650,000
3. Reconstruction	1,806,246	1,250,000	1,250,000
4. New construction	426,590	1,660,000	950,000
Total direct obligations	15,726,292	17,695,652	18,400,000
Obligations Payable Out of Reimbursements From Other Accounts			
2. Construction in progress	1,005,448	1,000,000	1,000,000
Obligations incurred	16,731,740	18,695,652	19,400,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions	370	433	482
Full-time equivalent of all other positions	150	134	158
Average number of employees	358	433	578
Average salaries and grades:			
General schedule grades:			
Average salary	$4,650	$4,720	$4,759
Average grade	GS–7.4	GS–7.4	GS–7.3
Crafts, protective, and custodial grades:			
Average salary	$2,750	$2,830	$2,910
Average grade	CPC–4.0	CPC–4.0	CPC–4.0
Ungraded positions: Average salary	$7,959	$7,944	$7,900
Personal service obligations:			
Permanent positions	$1,359,981	$1,834,237	$2,571,942
Part-time and temporary positions	1,123,993	1,071,298	969,990
Regular pay in excess of 52-week base	12,668	35,285	40,272
Payment above basic rates	844,425	1,403,200	1,292,903
Total personal service obligations	3,341,067	4,344,020	4,875,105
Direct Obligations			
01 Personal services	3,134,015	4,044,020	4,575,105
02 Travel	234,705	250,000	250,000
03 Transportation of things	389,812	420,000	420,000
04 Communication services	7,215	14,000	14,000
05 Rents and utility services	49,342	55,000	55,000
06 Printing and reproduction	4,528	6,000	6,000
07 Other contractual services	2,243,546	642,400	735,400
08 Supplies and materials	1,565,523	2,394,000	1,747,595
09 Equipment	85,470	400,000	400,000
10 Lands and structures	8,330,289	9,861,732	10,638,000
13 Refunds, awards, and indemnities	1,525	1,900	1,900
15 Taxes and assessments	5,322	6,600	7,000
Subtotal	16,051,292	18,095,652	18,850,000
Deduct charges for subsistence and quarters	325,000	400,000	450,000
Total direct obligations	15,726,292	17,695,652	18,400,000
Obligations Payable Out of Reimbursements From Other Accounts			
01 Personal services	207,052	300,000	300,000
07 Other contractual services	672,196	500,000	500,000
08 Supplies and materials	126,200	200,000	200,000
Total obligations payable out of reimbursements from other accounts	1,005,448	1,000,000	1,000,000
Obligations incurred	16,731,740	18,695,652	19,400,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$18,430,535	$11,691,527	$14,387,179
Obligations incurred during the year	16,731,740	18,695,652	19,400,000
	35,162,275	30,387,179	33,787,179
Deduct:			
Reimbursable obligations	1,005,448	1,000,000	1,000,000
Obligations transferred to "Construction of roads, Alaska (liquidation of contract authorization), Office of Territories"	8,000,000		
Unliquidated obligations, end of year	11,691,527	14,387,179	13,787,179
Total expenditures	14,465,300	15,000,000	19,000,000
Expenditures are distributed as follows:			
Out of current authorizations	14,465,300	8,750,000	10,000,000
Out of prior authorizations		6,250,000	9,000,000

OPERATION AND MAINTENANCE OF ROADS, ALASKA

Amounts available for obligation

Appropriation or estimate (obligations incurred):	
1952	$2,940,000
1953	3,318,000
1954	3,400,000

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
1. Major roads	$1,659,032	$1,734,120	$2,044,130
2. Local and feeder roads	1,243,907	1,523,565	1,305,870
3. Shop facilities	37,061	60,315	50,000
Obligations incurred	2,940,000	3,318,000	3,400,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	162	208	178
Full-time equivalent of all other positions	106	87	83
Average number of all employees	214	219	202
Average salaries and grades:			
General schedule grades:			
Average salary	$4,650	$4,720	$4,759
Average grade	GS–7.4	GS–7.4	GS–7.3
Ungraded positions: Average salary	$7,959	$7,944	$7,900
01 Personal services:			
Permanent positions	$595,793	$883,038	$951,963
Part-time and temporary positions	798,687	695,544	662,626
Regular pay in excess of 52-week base	9,702	24,343	21,728
Payment above basic rates	646,808	968,075	907,683
Total personal services	2,050,990	2,571,000	2,544,000
02 Travel	59,477	50,000	50,000
03 Transportation of things	52,832	30,000	30,000
04 Communication services	3,217	6,000	6,000
05 Rents and utility services	9,148	20,000	20,000
06 Printing and reproduction	2,845	4,000	4,000
07 Other contractual services	212,895	165,400	231,195
08 Supplies and materials	172,612	255,178	165,205
09 Equipment	42,790	200,000	200,000
10 Lands and structures	385,000	100,822	280,000
13 Refunds, awards, and indemnities	476	600	600
15 Taxes and assessments	12,642	15,000	19,000
Subtotal	3,004,924	3,418,000	3,550,000
Deduct charges for subsistence and quarters	64,924	100,000	150,000
Obligations incurred	2,940,000	3,318,000	3,400,000

Analysis of expenditures

Obligations incurred during the year (total expenditures out of current authorizations):	
1952	$2,940,000
1953	3,318,000
1954	3,400,000

Mr. JENSEN. We will now take up the Alaska Road Commission. We have with us Mr. A. F. Ghiglione, Commissioner of Roads for Alaska.

I have always had a high regard for the efficiency of the Alaska Highway Commission.

Mr. GHIGLIONE. Thank you.

Mr. JENSEN. In fact, I have said on many occasions that I saw roads built in Alaska for less money than they were built on the mainland.

Mr. GHIGLIONE. Thank you.

Mr. JENSEN. I have also often said that our own State highway commissions here could take a leaf from the book of the Alaska Highway Commission and their able engineers. So, I hope you do not let us down and I hope you keep on doing the good job which you have done.

Mr. GHIGLIONE. Thank you, sir.

Mr. JENSEN. I have also heard that some of the roads that were built by the Bureau of Roads up there cost a lot more for the same type of road as you people build. So,. do not let us down and keep on doing a good job.

Mr. GHIGLIONE. Do not worry, sir; that is our business.

Mr. JENSEN. After this committee visited Alaska in 1945, we said at most every meeting we had that we could not develop Alaska, or any other area, without a good road system, and we have been quite liberal in appropriating money for roads in Alaska. I think the reason for that is that you would expend the money very properly, judiciously, and efficiently.

That is why we sincerely hope you will make every dollar count that the taxpayers of America and the mainland expend for that very necessary road-building program.

Do you have a statement that you wish to make at this time on your request for funds for Alaska highway building?

Mr. GHIGLIONE. Yes, sir; I would like to say a few words.

GENERAL STATEMENT

I certainly appreciate your remarks and the opportunity to again discuss our program.

As you know, the program which we are continuing has been providing approximately 110 miles of pioneer new roads a year, in addition to rebuilding and paving of the through highways of approximately 250 miles a year.

That program was originally justified by the military but it has proven of tremendous value to the Territory itself. The increase in civilian settlement and industry is reflected in the increased registration of cars in the last 4 years, which has trebled. In the city of Valdez, where we now maintain the road on a year-round basis, the population has trebled in 3 years. That, of course, is pretty much the

trend of history in our States; when we get a road in, the population moves in.

In spite of this program, as you can see by the map, there are tremendous areas up there without a mile of road. There are populated cities and potential industrial areas inaccessible by road and our big hope is to continue to extend our feeders into those areas.

PRESENT PROGRAM

The present program continues that policy of extending roads and of paving the main highways, which was justified by the military. In addition, we are picking up two new projects, which we consider necessary. One is in the Homer, Kenai area, in connection with the farm development, school-bus routes, and star mail routes, all in one. The other is to bypass the city of Anchorage where traffic builds up to the point where it creates an impasse practically every day. This project will get the traffic on a bypass highway, which is designed to carry heavier traffic density around the city.

The program also plans to continue on the level that we consider about the minimum on which we can get economical competitive bids on these heavy reconstruction jobs. I am glad to say that we have been getting increasingly better bids. Our bids in the last year have had lower unit prices than they did 3 years ago when we started this program. We have brought in competitive contractors to the area, and I certainly would hate to lose those by cutting our program

CONSTRUCTION PROGRAM SUMMARY

Mr. JENSEN. We will insert into the record pages 135, 136, and 143 through 145 of the justification at this point.

(The matter referred to follows:)

Preparation of plans

Subactivity	Estimated total cost	Appropriated to June 30, 1953	Estimate for 1954
Cordova: Richardson Highway	$220,000	$160,000	$40,000
Livengood: Rampart	95,000	40,000	55,000
Chitina: McCarthy	75,000		35,000
Snag Point: Aleknagik Lake Road	40,000		30,000
Seldovia: Yakaloff Bay	20,000		20,000
Cordova: Bering River Road	100,000		30,000
Nenana: McKinley Park	100,000		20,000
Nome: Teller Road	40,000		30,000
Farm and industrial roads	[1] 120,000		40,000
Development of plans for a highway system, southeastern Alaska	250,000		250,000
Total	1,060,000	200,000	550,000

[1] Recurring requirement.

NOTE.—This activity estimate provides funds for reconnaissance and location surveys and for preparation of maps and designs on which future construction and detail estimates are based.

Construction in progress

Subactivity	Estimated total cost	Appropriated to June 30, 1953	Estimate for 1954
(a) Taylor Highway	$6,480,000	$4,829,000	$500,000
(b) Richardson Highway, surfacing	33,000,000	26,624,000	3,340,000
(c) Alaska Highway, surfacing	15,700,000	8,060,000	4,000,000
(d) Richardson Highway, McKinley Park	6,200,000	3,100,000	1,000,000
(e) Local farm, industrial, and military access roads	(1)	600,000	400,000
(f) Glenn Highway, surfacing	18,700,000	14,690,000	4,010,000
(g) Cordova, Richardson Highway	11,000,000	650,000	2,400,000
Total	91,080,000	58,553,000	15,650,000

[1] Recurring requirement.

Reconstruction

Subactivity	Estimated total cost	Appropriated 1953	Estimate for 1954
IMPROVEMENT OF EXISTING ROADS AND BRIDGES			
(a) Road improvement	(1)	$750,000	$750,000
(b) Bridge replacements	(1)	500,000	500,000
Total		1,250,000	1,250,000

[1] Recurring requirement.

This estimated amount provides for numerous relatively small relocation jobs on feeder and local roads where traffic development has occurred and provides progressive improvement of old and overburdened routes. It covers curve and excessive grade elimination, replacement or widening of obsolete, inadequate or dangerous bridges, placing of crush-rock surfacing on high traffic areas, and installation of traffic safeguards for protection of the travelling public. The following is a selected list of improvement projects having high priority and being most urgent for immediate action:

ROAD IMPROVEMENTS, 1954

Feeder roads:	
Steese Highway	$150,000
Nome extensions	30,000
Sterling Highway, crushed rock	150,000
Matanuska Valley feeder connections	50,000
Edgerton Cutoff	80,000
Total	460,000
Local roads:	
Anchorage locals	80,000
Palmer-Matanuska locals	50,000
Fairbanks locals	60,000
Homer locals	40,000
Kodiak locals	40,000
Valdez-Mineral Creek	20,000
Total	290,000
Total, road improvements	750,000

BRIDGE REPLACEMENTS

Glenn Highway: Chickaloon	$200,000
Richardson Highway:	
Stewart Creek	50,000
Tsaina River	70,000
Gun Creek	100,000
Alaska Highway:	
Scottie Creek	40,000
Desper Creek	40,000
Total bridge replacements	500,000

New construction

Subactivity	Estimated total cost	Estimate for 1954
Anchorage-Elmendorf alternate through route [1]	$500,000	$250,000
Kasilof-Kenai-Sterling Highway [2]	700,000	700,000
Total	1,200,000	950,000

[1] Anchorage-Elmendorf alternate through route, $250,000: This project consists of an extension of the Seward-Anchorage Highway which is scheduled for completion in November 1953 to bypass the city of Anchorage and furnish a direct freighting route to Fort Richardson and Elmendorf Field. Most vehicular traffic originating south of Anchorage now must pass through the city, and this volume, coupled with normal city traffic, totals nearly 22,000 cars and trucks per day. Expected increases in heavy truck traffic from Seward will further aggravate this problem, and it is planned to construct approximately 6 miles of new route around Anchorage. The estimate of $250,000 will cover acquisition of rights-of-way, and location surveys, and engineering designs which will form the basis for a construction project estimate in 1955.

[2] Kasilof-Kenai-Sterling Highway, $700,000: This proposed new route involves construction of approximately 20 miles of low-grade road along the west shore of Cook Inlet. The loop formed will serve a number of homesites of resident fishermen and small community settlements; it will also afford access to a large area of excellent homestead land between the Kasilof and Kenai Rivers. The loop connection of the Sterling Highway with the Kasilof-Kenai development will facilitate mail delivery and school-bus operation, and will open up a feasible area for common-carrier bus operations.

Mr. JENSEN. Give us a summary of the roads that are now under construction.

Mr. GHIGLIONE. Briefly; yes, sir. I will start from Anchorage, which is the largest city and has the headquarters for all of the military in Alaska, Fort Richardson, and Elmendorf Air Force Base. The highway presently is paved from Anchorage south 70 miles toward Seward, which is the ice-free port. The remaining portion of that highway has been completely reconstructed.

SEWARD TO PORTAGE

Mr. JENSEN. What is the condition of the road from Seward to Portage?

Mr. GHIGLIONE. We call it 58-mile Junction and Portage is near mile 90.

Mr. JENSEN. At what point, then, does the Seward road connect on with the main highway?

Mr. GHIGLIONE. Fifty-eight miles up on the old Seward Highway, where we started the construction of the new highway. The new construction is now completely paved. The old highway has been completely rebuilt to a standard for paving and the paving contract has been let.

Mr. JENSEN. To a standard for what?

Mr. GHIGLIONE. For paving, the grading is 28 feet wide and we will put on a 20-foot-wide paving.

Mr. JENSEN. What kind of paving will that be?

Mr. GHIGLIONE. Asphalt pavement; 2-inch asphalt surface.

Mr. JENSEN. How much base will be under it?

Mr. GHIGLIONE. It would be an average, I would say, of 18 inches of porous gravel underneath the pavement, which is adequate to carry the standard highway loads that we get.

Mr. JENSEN. That road has been used for how long?

Mr. GHIGLIONE. It has been open all the way through for about 1½ years.

Mr. JENSEN. How is the road standing up?

Mr. GHIGLIONE. There is no distress at all.

Mr. JENSEN. What is the heaviest traffic that goes over it?

Mr. GHIGLIONE. It is designed for a maximum load of 80,000 pounds, distributed on 5 axles.

Mr. JENSEN. So, it could be termed as a military traffic highway?

Mr. GHIGLIONE. Yes, sir.

Mr. JENSEN. It would handle anyting that the military would want to haul over the road without destroying the roadbed?

Mr. GHIGLIONE. That is true. Anything that would be permitted on the main highways in the States.

Mr. JENSEN. And it has been done for the past year or more?

Mr. GHIGLIONE. That is true. Freight trucks can use the highway if they stay within the load and speed limitations.

ANCHORAGE TO GLENN ALLEN

Mr. JENSEN. Now, take the next section.

Mr. GHIGLIONE. This [indicating] is completely paved. That is the road from Anchorage to Glenn Allen.

Mr. GHIGLIONE. Yes, sir; on the Glenn Highway near the junction point between the Glenn and Richardson Highways. That section is complete. The Glenn Highway also goes from Glenn Allen to the Alaska Highway. It used to be called the Tok cut-off. It is now all the Glenn Highway from Anchorage to the junction, about 350 miles.

Mr. JENSEN. That is all paved?

Mr. GHIGLIONE. That eastern section is not paved. All of it but 11 miles is reconstructed to the 28-foot-wide standard, with ballast, and ready for paving. The funds we are asking for will complete the paving of that section so it will be paved from Anchorage to the Alaska Highway.

THE ALASKA HIGHWAY

To continue on, we are also asking funds for the work from Fairbanks south. We have completed the paving of the first 100 miles of the Richardson Highway to Big Delta, which is the big Army Arctic test station. We have completed the first 100 miles of paving on the Alaska Highway. We have a contract ready to be let with our 1953 funds for the first 50 miles south of the Tok junction on the Alaska Highway. That is for the reconstruction of it, and we are asking funds here for the reconstruction of the last section.

Mr. JENSEN. Is that the section which connects up with the Canadian border?

Mr. GHIGLIONE. Yes, sir; with the Canadian border.

Mr. JENSEN. What is Canada doing in this program?

Mr. GHIGLIONE. The Alaska Highway in Canada is under the military and run by the military.

Mr. JENSEN. Do you mean by the Canadian military?

Mr. GHIGLIONE. The Royal Canadian Engineers.

Mr. JENSEN. What shape is that road in now?

Mr. GHIGLIONE. It is in very good shape. They have been improving it and taking out a lot of the bad sections—the crooked sections, improvement has been made to a crushed-gravel standard. They have been putting crushed gravel on it.

Mr. JENSEN. You say it is in good shape. Is that for just a portion of it, or the full length of it?

Mr. GHIGLIONE. The full length of it to Dawson Creek.

Mr. JENSEN. To where?

Mr. GHIGLIONE. To Dawson Creek; about 1,200 miles from here [indicating], which is the end of the Canadian Alaska Highway. It is about 500 miles from Edmonton to Dawson Creek the beginning of the Alaska Highway.

Mr. JENSEN. It is close to the northern border of the United States?

Mr. GHIGLIONE. Yes, sir.

Mr. JENSEN. How far away?

Mr. GHIGLIONE. It is in Alberta, not too far from Havre, Mont., or Great Falls, Mont.

Mr. JENSEN. So, anyone can drive from any place in the United States now to Fairbanks, Alaska, and up to Circle, on an all-weather road?

Mr. GHIGLIONE. Yes, sir, on an all-weather road.

Mr. JENSEN. And Circle, Alaska, is about 50 miles south of the Arctic Circle, is it not?

Mr. GHIGLIONE. It is a little farther than 50 miles.

Mr. JENSEN. That is what I thought, because I had been there and I remember at that time they told us we were just about 50 miles south of the Arctic Circle.

Mr. GHIGLIONE. That is right.

Mr. JENSEN. Nome is not too far south of the Arctic Circle, possibly 100 miles?

Mr. GHIGLIONE. Nome is about 100 miles south of the Arctic Circle. Yes, sir; that is right. Here is Nome and here is the Arctic Circle.

Mr. JENSEN. Circle City is north of Nome?

Mr. GHIGLIONE. That is right.

Mr. JENSEN. So, you can travel from your home, Mr. American, right today on hard-surfaced roads to within 50 miles of the Arctic Circle?

Mr. GHIGLIONE. Yes, sir; and there are quite a few tourists who do it every year. The number of tourists has doubled over the previous year.

Mr. JENSEN. Thank you. Go ahead.

RICHARDSON HIGHWAY

Mr. GHIGLIONE. Continuing the Richardson Highway, which was the original highway in Alaska—the old winter sled train, which was developed in 1905—is the main truck route in Alaska. It comes from the farthest north ice-free port in Alaska, Valdez. At present

we have paved up to Thompson's Pass and the contract will carry on to about mile 35. We are now letting a contract for the gap which exists between mile 35 and mile 80, at Tonsina. We have the funds for that. It is paved from Tonsina to Gulkana, which is another 48 miles and also forms a part of the Glenn Highway.

We have under contract, and practically completed the section 58 miles north, which was our weakest section; it was contracted 2 years ago. The remaining section that is not reconstructed is through Isobel Pass, from Paxon to Rapids. Funds for that reconstruction are being requested here, but funds for the paving are not being requested at this time, because it is our policy to let the road stand for a year or two before we pave over new construction. That will complete the paving. In other words, we will in the future ask for funds for the completion of that paving over Isobel Pass and this paving, which is the missing link between Thompson Pass and Tonsina, which is presently being reconstructed to paving standard.

Those are all of the paving projects which, as I say, have been justified by the military, and which have proved a great boom to the Territory.

OTHER PROJECTS

Other going projects for which we have requested funds, are those which will tie in with the highway system. The Richardson to McKinley Park road will provide the necessary connection to the isolated park system so that people from Alaska and others from the States can drive into the second largest United States park. That is about 50 percent complete. We are requesting funds to continue construction from both ends.

The other large going project is the Cordova to Richardson road, which has been started. We have had $650,000 to date and contracts have been let to carry the road out to the Copper River flats. This program will provide a great boost to the fishing industry, because they previously could not get their fish into Cordova during stormy weather. Now they will be able to bring them in on the highway. The funds we are requesting will carry our road across the mouth of the Copper. We have to cross the river twice; we have to get around both Miles and Childs Glaciers. The old upper railroad bridge will be used to bring us back across the river, but most of the lower bridge has been taken out by nature in years past. The funds we are requesting in the amount of $2,400,000 are to get us completely across the Copper River. We consider it best to build on the south end, rather than the north end of this highway, even though we could get more mileage on the north end, because of the great interest that is being put into the Katalla-Yakataga area. The Interior Department has let a lease for drilling for oil in that area for 12 years, which requires $1 million a year from the Phillips Oil Co. Big coal deposits are in this area and there are any number of mining possibilities. Getting the road across the river will give access to this area, which is impractical any other way.

Now, the last continuing project is our highway into Eagle on the Yukon River. You can travel through the highway at present, but it is all through permanently frozen country and we have to spend the additional funds we are requesting to bring it up to standard.

Mr. JENSEN. It appears by the marking on this map that that road runs partially into Canada.

Mr. GHIGLIONE. On the border. It looks like it, but it is 20 or 30 miles from the border most of the way through. We do touch the border with about a 15 mile spur to connect with this Canadian road that goes into Dawson.

Mr. JENSEN. How much is the population of Eagle?

Mr. GHIGLIONE. At present, I do not think there are over 100 people in the whole area.

Mr. JENSEN. What is the population of Dawson?

Mr. GHIGLIONE. Dawson, until 2 years ago, was the capital of the Yukon. I would guess there are about 500 people there now.

Mr. JENSEN. How many people are there living at Circle. That is now almost a ghost town, is it not?

Mr. GHIGLIONE. There is only a handful.

Mr. JENSEN. It is a dead town?

Mr. GHIGLIONE. Yes, sir.

Mr. JENSEN. Do we still maintain a store there?

Mr. GHIGLIONE. The Northern Commercial Co. has a store there.

Mr. JENSEN. That is not a federally financed store? That is a private store?

Mr. GHIGLIONE. Yes, sir.

(Discussion off the record.)

Mr. JENSEN. Does that complete your discussion?

NEW PROJECTS

Mr. GHIGLIONE. The major projects under construction. The two new projects——

Mr. JENSEN. That is what I was going to ask you next, the new projects that you are asking money for in the 1954 budget.

Mr. GHIGLIONE. Well, one does not show on this map. It leads from the Glenn Highway to the Seward Highway, bypassing Anchorage, and diverting heavy traffic. There is truck traffic, construction, and the military traffic, and traffic from the outskirts of Anchorage. The count on the present road on both sides of Anchorage is over 22,000 vehicles a day on a 2-lane highway. The State standard is about 6,000.

Mr. JENSEN. What is the population of Anchorage now?

Mr. GHIGLIONE. Within the city limits, I believe around 20,000, but greater Anchorage, around 60,000.

Mr. JENSEN. You say "greater Anchorage."

Mr. GHIGLIONE. That is with all the surrounding communities that have not been taken into the city.

Mr. JENSEN. They are municipalities?

Mr. GHIGLIONE. No, they are not incorporated, just the outskirts of Anchorage.

LOCAL REVENUES

Mr. JENSEN. That is the thing the committee could not understand. People go up there and build nice homes outside the incorporated city limits and they pay no taxes whatever. We recommend that they just expand their corporate limits and take them in. Of course, those people won't like that; nobody likes to pay taxes.

Mr. GHIGLIONE. They won't vote to come in. They have held an election to take in Mountain View and East Chester. They lost by a very small vote. The legislature is now trying to simplify the territorial law covering the extension of a city's corporate limits, so they can induce those areas to come in.

(Discussion off the record.)

Mr. JENSEN. I think the time has come when we had better inform some people up there about that. The day is coming when the Congress may get to the end of the road and say, "All right, if you don't like to pay taxes, we won't appropriate any money for roads in Alaska, or anything else, except to take care of the poor folks who can't take care of themselves." That time could come and could come awfully fast.

I hope we can get this squabble settled with Communist Russia pretty quick. After that, certainly the taxpayers of America are going to insist that their representatives in Congress see to it that people with taxable property in Alaska pay their fair share not only to run the government of Alaska, but also the Government of the United States like any other American.

Mr. GHIGLIONE. Yes; I agree, sir.

Mr. JENSEN. I want to ask you this, while I am on that critical vein. Has the State legislature finished their session?

Mr. GHIGLIONE. No, sir; they are in session now.

Mr. JENSEN. Are they considering additional revenues for the Territory?

Mr. GHIGLIONE. Yes, sir. In the light of our discussion here a year ago, I have taken an active part in forcing the issue, both whenever I was able to speak to a group or a community or a chamber of commerce, and we did help draw up the bills that are being considered in the House and Senate to provide 5 cents tax on fuel and a truck tax equal to the average in the States.

Mr. JENSEN. I recommended the issuance of a truck license on several occasions, and I got some pretty mean letters from some of the truck owners up there, but it didn't deter me one iota. I know that the truck-license revenue has been criminally low, and they might just as well know they're going to have to pay more, or as I said before, we are going to be a little more conservative in appropriating money for roads in Alaska. Certainly I don't know whether I would insist that they pay a comparable license fee with the United States or not. I would leave that to the discretion of a legislature of Alaska. They certainly should pay more than they are paying.

CONSTRUCTION SUMMARY

OTHER NEW PROJECTS

Mr. GHIGLIONE. The other new project is near the town of Kenai on the Kenai Peninsula. It is hard to show on this scale map; it creates a triangle south of Kenai and will consist of 20 miles of new road to open up land that has been classified as farming land, and to provide access to the fishing areas and the beach.

Mr. JENSEN. The road to Homer is completed?

Mr. GHIGLIONE. Yes, sir.

Mr. JENSEN. How many miles in that project?

Mr. GHIGLIONE. The new road is approximately 130 miles long.

Mr. JENSEN. How much did that cost?

Mr. GHIGLIONE. A little under $4 million, three-million-nine-hundred-thousand-and-something.

Mr. JENSEN. That is an all-weather road?

Mr. GHIGLIONE. Yes, sir.

Mr. JENSEN. Is it asphalt?

Mr. GHIGLIONE. It is a gravel road.

Mr. JENSEN. It is holding up all right?

Mr. GHIGLIONE. Yes, sir.

Mr. JENSEN. 130 miles of road for $4 million.

Mr. DAVIS. Mr. Chairman, that cost figure also included maintenance of each section as it was completed.

Mr. GHIGLIONE. The people start immediately to use a road as soon as it is opened, and you have to maintain it.

Mr. JENSEN. That road went through very rugged terrain.

Mr. GHIGLIONE. Definitely, sir.

Mr. JENSEN. Tell us about the terrain.

THE KENAI PENINSULA AREA

Mr. GHIGLIONE. It is very swampy type of country. It is, however, also the best farming country. There is very little gravel in it, which is always a difficult problem for a roadbuilder. There are several major bridge crossings.

Mr. JENSEN. You have quite a little traffic on that road.

Mr. GHIGLIONE. Yes, sir. With the completion of the road into Anchorage, we have had a flood of traffic through there. Anchorage people are taking up home sites in Homer and the weekend traffic is almost as bad as in any city on the east coast.

Mr. JENSEN. How much warmer is it in Homer than it is in Fairbanks? What is the difference?

Mr. GHIGLIONE. Homer is 10° warmer than Anchorage in the winter. The average temperature in Fairbanks in the winter would be around 30 or 35 below; in Homer the average would not be below zero.

Mr. JENSEN. Isn't it a fact that the temperature at Homer is about the same as the northern part of the United States, say northern Minnesota?

Mr. GHIGLIONE. I don't think it is as rigorous as Minnesota. The temperature never gets as extreme.

Mr. JENSEN. That is something a lot of people don't realize. How large is the Kenai Peninsula area.

Mr. GHIGLIONE. The road is 130 miles long, and the area would be about 40 miles wide.

Mr. JENSEN. Eighty by forty miles?

Mr. GHIGLIONE. Yes, sir.

Mr. JENSEN. And most of that will finally be developed into agricultural, productive land?

Mr. GHIGLIONE. Yes, sir; you don't get into the mountains until you get way back. There are big lakes and it is very pretty country.

Mr. JENSEN. I remember when we were there in 1945, we flew from Anchorage to Homer. That is the only way we could get to Homer

except in small boats, and the committee, I remember, asked how they got their produce back to market, and they said by little rowboats. I said "You don't have a highway down here for this fine agricultural area," and they said "No." One farmer showed us a cabbage head that weighed 52 pounds, and garden truck that would be as good as we raise in Iowa.

And that was the day I said to the people "Why don't we have a road down here?" They didn't know, and so the committee made up their minds that we would recommend a road be built connecting the Anchorage road to Homer. Your Alaska Highway Commission got busy and drew the plans and we appropriated the money, and that road, in my estimation, from the standpoint of the economy of Alaska is going to prove that section of Alaska to be the greatest agricultural section in the whole Territory. Will you agree with that?

Mr. GHIGLIONE. Yes, sir; there has been a great boom in that territory.

Mr. JENSEN. That is one road, along with the rest of the roads that have been built in Alaska during the past few years that I think was money well spent. Now, anything else?

MAINTENANCE COSTS

Mr. JENSEN. How much are you asking for maintenance?

Mr. GHIGLIONE. We are asking $3,400,000, which is only about $80,000 more than we had last year. We are using the same cost per mile.

Mr. JENSEN. What is your cost per mile for maintenance?

Mr. GHIGLIONE. It varies, sir. The paved highways are the highest. About $2,400——

Mr. JENSEN. You can furnish the information later.

Mr. DAVIS. Yes, sir.

(The material referred to follows:)

The main arteries of the expanding highway system in Alaska are maintained and kept open on an annual basis, and summer maintenance is provided for all roads. The following is a summary of estimated cost for the fiscal year 1954:

Classification	Cost per mile	Number of miles	Total cost (appropriation)
Summer maintenance:			
Through roads:			
Paved	$1,900	693.6	$1,317,840
Gravel	1,100	295.7	325,270
Feeder roads	600	1,238.2	742,920
Local roads	250	1,331.6	332,900
Winter maintenance:			
Through roads:			
Paved	500	655.0	327,500
Gravel	400	233.8	93,520
Feeder roads	200	240.9	48,180
Local roads	292	622.3	181,870
Shop facilities			50,000
Total			3,420,000

PRIORITY OF PROJECTS

Mr. JENSEN. What are the estimated unobligated funds as of June 30, 1953? What will they be?

Mr. GHIGLIONE. They will all be obligated, sir. The fact is we have permission for advance obligation of funds for maximum utilization of the short construction season in Alaska. Our 1953 funds will be all obligated.

Mr. JENSEN. Now the committee wants to be perfectly frank in asking this question.

What would you consider to be priority No. 1 and No. 2, so far as new construction is concerned?

Mr. GHIGLIONE. I would say definitely the No. 1 would be the bypass road in Anchorage; that is one we have to have because our present road won't handle the traffic.

Mr. JENSEN. The other is where?

Mr. GHIGLIONE. The loop road down at Kenai.

Mr. JENSEN. How long?

Mr. GHIGLIONE. Twenty miles.

Mr. JENSEN. That simply connects the end of a spur to the road leading south to Homer?

Mr. GHIGLIONE. Yes, sir; it creates a triangle.

Mr. JENSEN. It isn't absolutely necessary?

Mr. GHIGLIONE. No, sir; it is a development road.

Mr. JENSEN. How much is that? What is the estimated cost?

(Discussion off the record.)

Mr. GHIGLIONE. Seven hundred thousand, sir.

Mr. JENSEN. All right. I wish we could give it to you, but I am afraid we can't. It has to do with the military?

Mr. GHIGLIONE. No, and delaying it won't create too much hardship.

Mr. JENSEN. We can do that later. I want to be perfectly frank with you.

LACK OF ROADS

Mr. NORRELL. As I read the map before me here, the first line there in black is a paved highway, the next is gravel and the next is what is projected for this coming fiscal year.

Mr. GHIGLIONE. Yes, sir.

Mr. NORRELL. On the line between Canada and the United States, there is a road that goes from Eagle south. What is the reason that you desire to do that?

Mr. GHIGLIONE. We show it blue all the way through because we did get a passable route opened all the way to Eagle this year, but it is very low standard. Our method of construction is called "stage construction." When we get the ground opened up through perma-frost, the whole country starts flowing, and additional stages of construction are necessary. We must go back and finish the road.

Mr. NORRELL. Pave it?

Mr. GHIGLIONE. No; provide a gravel road.

Mr. NORRELL. What do you want to do on the road running from Cantwell east? Is that gravel?

Mr. GHIGLIONE. That is an all-gravel, 24 feet surface all-weather road.

Mr. NORRELL. Does this map show all the highways of any kind or description in Alaska?

Mr. GHIGLIONE. Yes, sir; every one of them.

Mr. NORRELL. If I lived over here in some of these little towns, we will say Hughes—that is a little town north——

Mr. GHIGLIONE. Near the Arctic Circle.

Mr. NORRELL. How would I get out of that town to get anywhere? How do you do it?

Mr. GHIGLIONE. The only way into Hughes is by winter freight or by small planes called "bush planes." That is a little mining town. After the freeze-up, they come over land by tractor train. Heavy freight has to come over late in the winter.

Mr. NORRELL. How do they make a living there?

Mr. GHIGLIONE. Entirely mining at Hughes. The facts are that most of these isolated areas are mining community areas.

Mr. NORRELL. Even in the working season they would have only some natives and a few other people?

Mr. GHIGLIONE. Yes, sir.

Mr. NORRELL. If you lived in Fairbanks and wanted to go to Nome, you couldn't do it by automobile or buggy or wagon.

Mr. GHIGLIONE. No chance in the world. The only way is by plane or boat and there is no regular river boat transportation running down the Yukon to the mouth any more.

To maintain our roads, for instance, at Nome, or isolated roads along Bristol Bay, the only way we can ship heavy freight from interior Alaska is by way of Seattle.

LOCAL CONTRIBUTIONS FOR ROAD CONSTRUCTION

Mr. NORRELL. How much money do they raise in Alaska for road construction?

Mr. GHIGLIONE. The Territorial income contribution to our work has been about $350,000 a year.

Mr. NORRELL. How is that raised?

Mr. GHIGLIONE. Fuel and vehicle registration taxes.

Mr. NORRELL. What is the gasoline tax?

Mr. GHIGLIONE. At present it is only 2 cents, but there is a bill in the legislature to raise it to 5 cents.

Mr. NORRELL. What does gasoline cost a car user in Fairbanks?

Mr. GHIGLIONE. About 40 cents a gallon.

Mr. NORRELL. What is the argument for not charging 5 or 6 cents a gallon for tax?

Mr. GHIGLIONE. I have no argument.

Mr. DAVIS. It has not produced much revenue until the past few years.

Mr. NORRELL. In my State I think it is six and a half cents a gallon.

Mr. GHIGLIONE. The average throughout the United United is about 5 cents.

Mr. NORRELL. In some States, it goes to 7 and 8 cents.

Mr. GHIGLIONE. Yes, sir.

Mr. NORRELL. I maintain that Alaska should do more than they are doing.

Mr. GHIGLIONE. I think they will.

Mr. DAVIS. On that point of increased revenues, I want to support all you said about it and all Mr. Norrell said. I have discussed this with Governor Gruening several times in writing, and have urged them to take steps to increase those revenues. It isn't only important now, but if Alaska should become a State, this entire item of maintenance would pass to the State.

Mr. NORRELL. I can say this, that if Hawaii and Alaska are made States, I am not going to be willing to do anything for those two States that I won't be willing to do for any State in the Union.

Mr. DAVIS. One general observation. You will note that the highway system now connects the system of the United States with every important city in Alaska, except those on the south and southeast and 1 or 2 on the Bering Sea coast. It now connects those cities except Cordova which will be connected with the completion of the Cordova road. We have given the Territory through this program a highway system to connect to the United States.

Mr. JENSEN. Is there any other statement that you gentlemen would like to make.

Mr. GHIGLIONE. No, sir.

ALASKA RAILROAD

ALASKA RAILROAD REVOLVING FUND

Amounts available for obligation

Appropriation or estimate (obligations incurred):	
1952	$2,000,000
1953	3,906,000
1954	16,311,000

Analysis of expenditures

Obligations incurred during the year (total expenditures out of current authorizations):	
1952	$2,000,000
1953	3,906,000
1954	16,311,000

Business Type Statements

A. *Statement of sources and application of funds*

[For fiscal years ending June 30, 1952, 1953, and 1954]

	1952 actual	1953 estimate	1954 estimate
Funds Applied			
to operations			
Rail line operation:			
Acquisition of assets:			
Road property	$6,759,433	$4,400,000	$14,592,000
Equipment property	1,036,194	2,850,715	2,419,000
Miscellaneous physical property	209,933	50,000	
Total acquisition of assets, rail-line operation	8,005,560	7,300,715	17,011,000
Expenses:			
Maintenance-of-way and structures	4,140,299	4,675,000	4,675,000
Maintenance of equipment	2,935,310	3,225,000	3,225,000
Traffic	79,820	80,000	80,000
Transportation	8,158,576	11,400,000	11,400,000
Allocation of administrative expense	847,771	1,018,000	1,018,000
Miscellaneous	1,210	2,000	2,000
Total expenses, rail line operation	16,162,986	20,400,000	20,400,000
Noncapital rehabilitation	5,395,215	4,000,000	
Total funds applied to rail-line operation	29,563,761	31,700,715	37,411,000
River boat operation:			
Acquisition of assets:			
Dock and marine ways	390,353	200,000	
River boats and barges	91,912	1,000,000	500,000
Total acquisition of assets, river boat operation	482,265	1,200,000	500,000
Expenses:			
Maintenance of equipment	29,684	31,000	15,000
Salaries and wages—vessels	157,207	130,000	90,000
Fuel and lubrication—vessels	20,867	21,000	18,000
Supplies and material—vessels	40,430	40,000	35,000
Other expense—vessels	5,560	5,000	4,000
Terminal labor	5,216	5,000	5,000
Terminal expense	4,368	4,000	4,000
Allocation of administrative expense	14,511	15,000	14,000
Total expenses, river-boat operation	277,843	251,000	185,000
Total funds applied to river-boat operation	760,108	1,451,000	685,000
Hotel and mess operation:			
Expenses:			
Purchases	401,553	260,000	130,000
Salaries and wages	643,611	450,000	235,000
Utilities	170,300	150,000	75,000
Laundry	28,767	25,000	20,000
Allocation of administrative expense	38,058	35,000	20,000
Other expenses	65,492	80,000	40,000
Total funds applied to hotel and mess operation	1,347,781	1,000,000	520,000
Commissary operation:			
Expenses:			
Purchases	1,664,922	1,454,000	715,000
Salaries and wages	190,028	210,000	154,000
Utilities	5,446	6,000	5,000
Laundry	2,781	3,000	2,000
Allocation of administrative expense	12,321	10,000	9,000
Other expenses	16,594	17,000	15,000
Total funds applied to commissary operation	1,892,092	1,700,000	900,000
Increase in selected working capital items	2,324,523		
Total funds applied to operations	35,888,265	35,851,715	39,516,000
to financing			
Increase in Treasury cash			2,800,000
Total funds applied	35,888,265	35,851,715	42,316,000

A. *Statement of sources and application of funds*—Continued

[For fiscal year ending June 30, 1952, 1953, and 1954]

	1952 actual	1953 estimate	1954 estimate
FUNDS PROVIDED			
BY OPERATIONS			
Rail line operation:			
Income:			
Freight revenue	$16, 197, 306	$20, 400, 000	$20, 600, 000
Passenger revenue	974, 037	1, 000, 000	1, 000, 000
Mail and express revenue	241, 716	300, 000	300, 000
Other transportation revenue	176, 792	200, 000	200, 000
Total funds provided by rail-line operation	17, 589, 851	22, 100, 000	22, 100, 000
River boat operations:			
Income:			
Freight revenue	118, 499	216, 500	219, 500
Passenger revenue	479	500	500
Total funds provided by river-boat operation	118, 978	217, 000	220, 000
Hotel and mess operation:			
Income:			
Room rentals	140, 327	100, 000	50, 000
Food sales	415, 932	400, 000	200, 000
Meals and lodging furnished employees on official business	53, 686	50, 000	50, 000
Other sales	159, 173	150, 000	100, 000
Total funds provided by hotel and mess operation	769, 118	700, 000	400, 000
Commissary operation:			
Income:			
Sales to employees	1, 032, 840	1, 000, 000	300, 000
Sales to other departments	668, 273	700, 000	600, 000
Total funds provided by commissary operation	1, 701, 113	1, 700, 000	900, 000
Other income:			
Income:			
Sale of excess power	1, 980	2, 000	2, 000
Property rentals	65, 005	84, 000	98, 000
Total funds provided by other income	66, 985	86, 000	100, 000
Undistributed receipts:			
Sale of Eska Mine property	68, 663		
War surplus donations	619, 448	300, 275	300, 000
Total funds provided by undistributed receipts	688, 111	300, 275	300, 000
Decrease in selected working capital items		1, 706, 879	1, 985, 000
Total funds provided by operations	20, 934, 156	26, 810, 154	26, 005, 000
BY FINANCING			
Appropriations	2, 000, 000	3, 906, 000	16, 311, 000
Decrease in Treasury cash	12, 954, 109	5, 135, 561	
Total funds provided by financing	14, 954, 109	9, 041, 561	16, 311, 000
Total funds provided	35, 888, 265	35, 851, 715	42, 316, 000

EFFECT ON BUDGETARY EXPENDITURES

Total funds applied to operation	$35, 888, 265	$35, 851, 715	$39, 516, 000
Total funds provided by operation	20, 934, 156	26, 810, 154	26, 005, 000
Net effect on budgetary expenditures	14, 954, 109	9, 041, 561	13, 511, 000
The above amounts are charged (or credited (−)) as follows:			
To budgetary authorizations	2, 000, 000	3, 906, 000	16, 311, 000
To net receipts of the enterprise	12, 954, 109	5, 135, 561	−2, 800, 000

B. Statement of income and expense

[For fiscal years ending June 30, 1952, 1953, and 1954]

	1952 actual	1953 estimate	1954 estimate
RAIL LINE OPERATION			
Income:			
Freight revenue	$16,197,306	$20,600,000	$20,600,000
Passenger revenue	974,037	1,000,000	1,000,000
Mail and express revenue	241,716	300,000	300,000
Other transportation revenue	176,792	200,000	200,000
Total income	17,589,851	22,100,000	22,100,000
Expenses:			
Maintenance of way and structures	4,140,299	4,675,000	4,675,000
Maintenance of equipment	2,935,310	3,225,000	3,225,000
Traffic	79,820	80,000	80,000
Transportation	8,158,576	11,400,000	11,400,000
Allocation of administrative expense	847,771	1,018,000	1,018,000
Miscellaneous	1,210	2,000	2,000
Subtotal	16,162,986	20,400,000	20,400,000
Depreciation	1,486,763	1,700,000	1,700,000
Total expenses	17,649,749	22,100,000	22,100,000
Net loss (−) from rail line operation	−59,898		
RIVER BOAT OPERATION			
Income:			
Freight revenue	118,499	216,500	219,500
Passenger revenue	479	500	500
Total income	118,978	217,000	220,000
Expenses:			
Maintenance of equipment	29,684	31,000	15,000
Salaries and wages—vessels	157,207	130,000	90,000
Fuel and lubrication—vessels	20,867	21,000	18,000
Supplies and materials—vessels	40,430	40,000	35,000
Other expense—vessels	5,590	5,000	4,000
Terminal labor	5,216	5,000	5,000
Terminal expense	4,368	4,000	4,000
Allocation of administrative expense	14,511	15,000	14,000
Subtotal	277,843	251,000	185,000
Depreciation	29,628	31,000	35,000
Total expenses	307,471	282,000	220,000
Net loss (−) from river boat operation	−188,493	−65,000	
HOTEL AND MESS OPERATION			
Income:			
Rental of rooms	140,327	100,000	50,000
Food sales	415,932	400,000	200,000
Meals and lodging furnished employees on official business	53,686	50,000	50,000
Other sales	159,173	150,000	100,000
Total income	769,118	700,000	400,000
Expenses:			
Purchases	401,553	260,000	130,000
Increase in inventory	−2,842		
Cost of goods sold	398,711	260,000	130,000
Salaries and wages	643,611	450,000	235,000
Utilities	170,300	150,000	75,000
Laundry	28,767	25,000	20,000
Allocation of administrative expense	38,058	35,000	20,000
Other expenses	65,492	80,000	40,000
Subtotal	1,344,939	1,000,000	520,000
Depreciation	23,160	21,000	20,000
Total expenses	1,368,099	1,021,000	540,000
Net loss (−) from hotel and mess operation	−598,981	−321,000	−140,000

B. Statement of income and expense

[For fiscal years ending June 30, 1952, 1953, and 1954]

	1952 actual	1953 estimate	1954 estimate
COMMISSARY OPERATION			
Income:			
Sales to employees	$1,032,840	$1,000,000	$300,000
Sales to other departments	668,273	700,000	600,000
Total income	1,701,113	1,700,000	900,000
Expenses:			
Purchases	1,664,922	1,454,000	715,000
Increase in inventory	−178,658		
Cost of goods sold	1,486,264	1,454,000	715,000
Salaries and wages	190,028	210,000	154,000
Utilities	5,446	6,000	5,000
Laundry	2,781	3,000	2,000
Allocation of administrative expense	12,321	10,000	9,000
Other expenses	16,594	17,000	15,000
Total expenses	1,713,434	1,700,000	900,000
Net loss (−) from commissary operation	−12,321		
NONOPERATING INCOME			
Sale of excess power	1,980	2,000	2,000
Property rentals	65,005	84,000	98,000
Net nonoperating income	66,985	86,000	100,000
Net loss (−) for the year	−792,708	−300,000	−40,000
Deficit beginning of year	−12,943,200	−13,331,383	−13,631,383
Adjustment of nonfund items, prior years	404,525		
Deficit end of year	13,331,383	13,631,383	13,671,383

C. Statement of financial condition

[As of June 30, 1952, 1953, and 1954]

	1952 actual	1953 estimate	1954 estimate
ASSETS			
Cash:			
Revolving fund accounts	$7,475,561	$2,340,000	$5,140,000
Deposit fund accounts	14,467	10,000	10,000
In transit	283,573	350,000	360,000
Total cash	7,773,601	2,700,000	5,500,000
Accounts receivable:			
Traffic balances—receivable	32,093	100,000	100,000
Balances receivable—agents	903,010	1,000,000	1,000,000
Accounts receivable	2,451,093	1,900,000	1,900,000
Total accounts receivable	3,386,196	3,000,000	3,000,000
Inventories:			
Headquarter stores	8,316,650	6,454,000	4,464,000
Hotel supplies	41,336	40,000	30,000
Commissary store	574,912	500,000	500,000
Fuel oil—river steamers	5,696	6,000	6,000
Total inventories	8,938,594	7,000,000	5,000,000
Lands, structures, and equipment:			
Road property	96,461,173	99,861,173	113,453,173
Equipment property	17,737,835	21,487,835	24,206,835
Miscellaneous physical property	907,905	957,905	957,905
Eska mine property	232,254	232,254	232,254
Total lands, structures, and equipment	115,339,167	122,539,167	138,850,167
Less portion charged off as depreciation	12,183,882	12,635,167	13,190,167
Net lands, structures, and equipment	103,155,285	109,904,000	125,660,000
Deferred and undistributed charges	2,337,652	2,653,000	2,668,000
Total assets	125,591,328	125,257,000	141,828,000

C. Statement of financial condition—Continued

	1952 actual	1953 estimate	1954 estimate
LIABILITIES			
Accounts payable	$2,749,695	$2,500,000	$2,500,000
Deferred and undistributed credits	40,908	50,000	50,000
Total liabilities [1]	2,790,603	2,550,000	2,550,000
INVESTMENT OF U. S. GOVERNMENT			
Non-interest-bearing investment:			
Appropriations	149,293,782	153,199,782	169,510,782
Transfer Whittier branch from Army	8,000,000	8,000,000	8,000,000
Donations and grants	8,331,885	8,531,885	8,731,885
Contribution from others	315,908	416,183	516,183
Total appropriations and donations	165,941,575	170,147,850	186,758,850
Noncapital rehabilitation	−29,809,467	−33,809,467	−33,809,467
Retained deficits (−): Unreserved	−13,331,383	−13,631,383	−13,671,383
Total non-interest-bearing investment	122,800,725	122,707,000	139,278,000
Total liabilities and investment of U. S. Government	125,591,328	125,257,000	141,828,000

[1] Excludes obligations outstanding for items on order of: $14,878,552, as of June 30, 1951; $7,663,127, as of June 30, 1952; $5,000,000, as of June 30, 1953; and $9,000,000, as of June 30, 1954.

SCHEDULE A–1.—*Accrued expenditures by objects*

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	2,705	2,475	2,350
Average number of all employees	2,397	2,140	2,040
Average salaries and grades:			
General schedule grades:			
Average salary	$4,583	$4,583	$4,583
Average grade	GS–6.3	GS–6.3	GS–6.3
Crafts, protective, and custodial grades:			
Average salary	$3,032	$3,032	$3,032
Average grade	CPC–3.0	CPC–3.0	CPC–3.0
Ungraded positions: Average salary	$5,888	$5,950	$5,950
01 Personal services:			
Permanent positions	$13,812,462	$12,493,892	$11,880,907
Part-time and temporary positions	193,178	185,000	180,000
Regular pay in excess of 52-week base	42,099	40,108	93
Payment above basic rates	1,406,591	1,000,000	900,000
Total personal services	15,454,330	13,689,000	12,961,000
03 Transportation of things	8,175,871	12,504,940	9,063,940
07 Other contractual services	2,397,074	1,940,000	980,000
09 Equipment	968,531	3,723,715	2,824,000
10 Lands and structures	6,721,419	4,144,000	13,837,000
15 Taxes and assessments	60	60	60
Subtotal	33,717,285	36,001,715	39,666,000
Deduct charges for quarters and subsistence	153,543	150,000	150,000
Total accrued expenditures	33,563,742	35,851,715	39,516,000

BUDGET REVISION

Mr. JENSEN. Before we start discussing the Alaska Railroad, I should like to ask you if you know of the recommendation of the Interior Department regarding the revised budget?

Mr. NUCKER. We do. The reduction was $13,214,000.

Mr. JENSEN. That was for the rehabilitation of the Alaska Railroad from Seward to Portage, and for the dock at Seward. I feel that since that recommendation has been made, and since there is considerable difference of opinion in the committee regarding that item, I would say that most of the members of the committee feel at this

time that we would not be justified in making the appropriation for the rehabilitation of that stretch of road. And so I believe there would be no particular point, nor would it serve any good purpose, for us to discuss the details of that item.

Mr. NORRELL. I think maybe the record of the hearing should show what was presented to us for the requested appropriation.

Mr. JENSEN. I think so.

CONSTRUCTION OF SEWARD DOCK

The only thing I wish to know is whether or not we would be justified at this time in appropriating some money for the repair of docks at Seward. I am a great believer in the saying "A stitch in time saves nine." I wish you would tell us the condition of the dock at Seward, and why you think we should furnish the money to repair that dock in the 1954 budget, if you think we should.

Mr. NUCKER. I should like to ask the Assistant to the General Manager, Mr. Hinman, of the Alaska Railroad, to talk on this point.

Mr. JENSEN. Your name is Hinman. You are Colonel Johnson's assistant?

Mr. HINMAN. Yes, sir.

Mr. NUCKER. Mr. Hinman has been in charge of housekeeping, the fiscal-year operations and things of that nature. He is familiar with the books of the railroad and its plans.

Mr. JENSEN. I want to say for the record that Colonel Johnson, the general manager of the Alaska Railroad, was in Washington about 2 weeks ago. He came to my office and we had a visit about this item for the rehabilitation of the railroad from Seward to Portage, but we didn't talk too much about the condition of the dock at Seward. Mr. Johnson asked me if I thought he should appear before the committee. He said he was very busy in Alaska, and I knew we could not get to the Alaska Railroad hearings for at least 2 weeks from that time. I recommended to him that he go back to his job and in the event the committee felt his presence was required here at the hearing, we could notify him.

But now since the revised budget recommends that this item be deleted from the appropriations—and I knew that several days ago—I felt there was no need of Mr. Johnson making that long trip from Alaska here to be heard before the committee. I wanted to make that statement for the record so that those who read the record will know that Mr. Johnson was willing to appear before the committee, but that it was at my recommendation that he is not here and that he has sent in his assistant who will speak on the items in the bill for the Alaska Railroad.

Now, Mr. Hinman, will you tell us about the condition of the dock at Seward and attempt as best you can to justify the request which is made here for $4,498,000 for the construction of the Seward dock. We have a dock there now. Is this a complete new dock or is it for repairs of the present dock?

Mr. HINMAN. Mr. Chairman, it contemplates a complete new dock. A couple of years ago you appropriated a million and a half dollars for emergency repairs, some of which was spent on the dock and some on the line between Seward and Portage. The plans for a new dock at a new location were because of the very bad condition of the piling

under the present dock. It would have to be rebuilt. The location is not good. It is on the wrong way of the water. The storms blow ships against the dock. We contemplate when we build anything there at present, a new dock down on the end of the bay away from the present dock. It would be cheaper to build a new dock in the new location than it would to attempt to handle the traffic in the old dock while we were building. I personally would not recommend appropriating any money to repair the old dock.

Mr. JENSEN. Are the pilings now in such a rotten condition that it is dangerous?

Mr. HINMAN. It does form a hazard in the event of a storm and a ship would blow up against it, it does a lot of damage. It could collapse.

Mr. JENSEN. How high are the pilings under the platform?

Mr. HINMAN. I would say about 10 feet above high water.

Mr. JENSEN. How much under the water level?

Mr. HINMAN. I don't know that precisely.

Mr. JENSEN. Your estimate.

Mr. HINMAN. The pilings are from 90 to 100 feet long.

Mr. NUCKER. You have a deep-water harbor. The piles have to be that deep.

Mr. JENSEN. When was that dock built?

Mr. NUCKER. The larger portion between the years 1917 and 1922.

Mr. JENSEN. What kind of wood are the piles?

Mr. HINMAN. They are treated piling, fir.

Mr. JENSEN. Pressure-treated fir?

Mr. HINMAN. Creosoted fir piling.

Mr. JENSEN. What I am trying to find out is whether or not those pilings are in a rotted condition and might collapse if a ship is blown against them. Of course, a big heavy ship in a coastal storm blowing against almost anything is dangerous, but are there signs now that this dock is rickety?

Mr. HINMAN. Yes, sir, and the divers reported in 1947 that 50 percent of the piles are infested with marine borers. That is, under the dock warehouse. I believe approximately 75 pilings located under the dock had completely failed. They had fallen apart. We need to dismantle the warehouse structure in order to drive new pilings.

Mr. JENSEN. Have you driven any new piling, replaced piling?

Mr. HINMAN. There has been some piling replaced, and that is usually as a result of damage by a ship.

Mr. JENSEN. That is not under the warehouse?

Mr. HINMAN. No, sir.

ADVANTAGES OF BUILDING A NEW DOCK

Mr. NUCKER. There is another decided advantage to building of a new dock rather than repair the present dock. At the time the present dock was built, the traffic into Alaska was very small compared to today, with the net result that the cargo handling across the present dock today is extremely expensive by comparison with cargo handled over a modern dock, which is prepared to handle cargo in an efficient manner. So that to continue to repair the existing improperly built and inadequately sized dock would continue a high operating cost, in addition to involving dollars in that rehabilitation program.

Mr. JENSEN. Have you had dock engineers draw plans and specifications for this new dock?

Mr. HINMAN. No, sir.

Mr. JENSEN. How do you know this new dock will cost $4 million.

Mr. HINMAN. We expect that $498,000 would be spent for plans, test drillings, and drivings, in order to determine how the dock should be built.

Mr. JENSEN. This amount of money would complete all expenditures involved in the building of a good dock?

Mr. HINMAN. Yes, dock and warehouse planning and all facilities for handling three ships at one time.

Mr. JENSEN. You have three ships in there at one time?

Mr. NUCKER. Sometimes more than that. Ships have had to tie up waiting for dock space.

Mr. JENSEN. You have a lot of military equipment that comes to the Seward dock?

Mr. HINMAN. No, we do not.

Mr. JENSEN. That goes to Whittier. I presume there is every kind of a commodity that is used in Alaska comes to the Seward dock by ship.

Mr. HINMAN. Yes, sir, a great deal of lumber, building material, foodstuffs, general merchandise.

Mr. JENSEN. And you mean that you don't have enough dock space, that ships wait out at sea until the other ships can be unloaded?

Mr. HINMAN. Correct.

Mr. JENSEN. Does that happen frequently?

Mr. HINMAN. Not frequently, but it does often in the summertime. There are several times a month during the summertime when ships have to stand off to get dock space.

Mr. JENSEN. Would there be any point in building a smaller dock, possibly spending $2 million and then use the old dock as an auxiliary dock?

Mr. HINMAN. I don't believe it would, because it would cost just as much money to build a small dock and rebuild the old dock and the handling would be more expensive. The proposed location of the new dock is protected from the weather, and can handle it all through one facility which would be more economical.

REHABILITATION OF THE SEWARD-TO-PORTAGE LINE

Mr. DAVIS. The plans for the new dock were more or less tied to the plan for rehabilitating the railroad, and planned to give Seward permanent good port-harbor facilities tied with a good railroad facility. We have not had time to consider the possibility of an emergency program or needs of a program to keep the railroad in operation. It would seem to me that it would be desirable rather than try to make a decision on the matter of a new dock of $4 million, that you ask us to advise the committee within the next few days what Colonel Johnson considers the minimum emergency steps to keep the railroad in operation until this whole problem can be reconsidered and again presented to the committee. The present action, as I understand it, is in the nature of a deferment. The Secretary wants to go into this matter more fully himself. He wants to reconsider whether or not and when he will again request that.

Mr. JENSEN. I suppose that the Department would notify the committee of that very thing, so the committee could act intelligently when we mark up the bill.

Mr. DAVIS. We will undertake to do that in the next few days. This matter is of very great importance to the defense people, and they were very much concerned when they found it was being for the moment withdrawn and asked me to assure them that the line would remain in operation, but I was only able to say that it was nothing more than a deferment and there is no intention of changing the policy of keeping the Seward line in full operation and eventually rehabilitating it.

Mr. JENSEN. Mr. Johnson, of course, felt it was money well spent to rehabilitate the railroad from Seward to Portage. Of course, the facts are that the highway from Seward north is now capable of withstanding the same kind of military traffic as a stateside highway, which was just testified to by the Commissioner of Roads a few minutes ago.

Irrespective of whether we just furnish money to keep the railroad in repair from Seward to Portage, or whether it be completely rehabilitated, it seems to me to have very little bearing on whether or not this dock should be built, because the same amount of goods are going to be unloaded and the same amount of ships are going to dock at Seward. Isn't that so?

Mr. DAVIS. No, sir, I would not entirely agree. If it were decided not to rehabilitate the railroad and perhaps in the course of a few years to abandon it, on that line, the needs as to the dock would be entirely different. It would be a dock adapted to highway traffic rather than railroad traffic, and it would not be part of the railroad's program. It would be the firm intention of the railroad, if that should happen, to prepare to handle civilian traffic through Whittier. The railroad is dependent on traffic to Anchorage for 60 percent of its revenue on the average. It can't afford to have that traffic diverted to auto traffic. The railroad would be almost paralyzed if it were deprived of the Anchorage traffic.

ROLLINGSTOCK EQUIPMENT FOR NEW POWERPLANT COAL REQUIREMENTS

Mr. JENSEN. I know by Mr. Johnson's letter to me, which I shall insert in the record at this point, that he has also asked for rollingstock equipment, freight cars for transportation of coal, $1,555,000, and diesel electric locomotives, $1,164,000.

(The letter referred to follows:)

DEPARTMENT OF THE INTERIOR,
THE ALASKA RAILROAD,
Anchorage, Alaska, February 6, 1953.

Hon. BEN F. JENSEN,
Chairman, House Subcommittee on Appropriations,
Washington 25, D. C.

MY DEAR MR. JENSEN: I appreciate very much your having given me the opportunity to present to you personally information concerning the funds which the Alaska Railroad is seeking for the fiscal year 1954. Because of the indefinite postponement of the hearings before your subcommittee, it is necessary for me to return to Anchorage. However, in the event that you wish me to appear in person when the hearings are held, I will be glad to return to Washington.

We have asked for a total appropriation of $16,311,000 for the following purposes:

(1) Miscellaneous:	
(*a*) Seward dock	$4,498,000
(*b*) Shop and enginehouse facilities at Seward	712,000
(*c*) Seward yard facilities	48,000
(*d*) Seward-Portage rehabilitation, including roadway and track rebuilding, bridges, trestles, culverts and tunnels, roadway buildings, and communication facilities	8,334,000
Total	13,592,000
(2) For additional rolling stock equipment:	
(*a*) Freight cars for transportation of coal	1,555,000
(*b*) Diesel electric locomotives	1,164,000
Total	2,719,000

As you are so well aware, it was the intent of the Railroad to abandon the line between Seward and Portage in favor of the line from Whittier to Portage, but because of the insistence of military authorities that the port of Whittier be operated exclusively for military traffic, and the insistence of the military authorities that for strategic reasons two all-year ports served by the Railroad are essential for defense purposes, we have not been able to transfer the civilian traffic from the port of Seward to the port of Whittier, and the military authorities insist that this condition will not change in the near foreseeable future.

The Seward line has not been maintained up to standard because such expenditures could not be justified during the period when early abandonment was anticipated. In order to move the volume of traffic that must come through the port of Seward with reasonable dispatch and safety, it is absolutely necessary that our roadway be improved to the extent possible to haul the traffic with diesel electric locomotives because of the greater economy. The present docks at Seward have deteriorated to such an extent that the cost of necessary repairs for continued operation would be prohibitive. The construction of a new dock at a more favorable location will permit a very substantial savings in both money and time in the handling of traffic.

The request for locomotives and cars is occasioned by the tremendous expansion in the demands for coal to operate new powerplants constructed at the military bases. In our request to the Bureau of the Budget in fiscal year 1953, we requested 12 new locomotives and 400 cars. However, the Bureau of the Budget reduced this to 6 locomotives and 200 cars. In order to more nearly meet the immediate requirements, the funds provided for the acquisition of cars were used to purchase reconditioned secondhand cars instead of new cars, and we were able to obtain 280 70-ton secondhand reconditioned cars with the funds provided for the purchase of 200 50-ton new cars.

There will be an increase in the coal tonnage which the railroad will be required to move of about 229,000 tons in the year 1954 over the 600,000 tons estimated for the year 1953, and a further increase of about 513,000 tons in the year 1955 over 1954. In order to obtain the equipment in time for delivery at a date which will permit us to handle this tremendously increased volume, it will be necessary that the funds be provided in fiscal year 1954. We will explore the possibility of acquiring additional reconditioned secondhand cars. However, we do not recommend this as being economically practical because the life of the secondhand cars will be shorter and the transportation costs to Alaska are so great that it is more profitable, if possible, to acquire new equipment. I will advise you further in regard to my findings with respect to the practicability of purchasing the secondhand cars, if they are available.

Let me again express my sincere thanks for the opportunity of presenting this information to you for your consideration.

Sincerely yours,

J. P. JOHNSON, *General Manager.*

Mr. JENSEN. In addition to what Colonel Johnson has stated in his letter, will you tell us why you need this rolling stock?

Another thing: Should the committee decide not to appropriate money for the Seward-Portage line or to rehabilitate that section, would you then need all of the rolling stock which is requested in this 1954 fiscal year budget?

Mr. HINMAN. Yes, sir.

Mr. JENSEN. You would need that anyway?

Mr. HINMAN. Yes, sir. We want that equipment to transport coal.

Mr. JENSEN. Go ahead. Tell us why you need this rolling stock.

Mr. HINMAN. The total coal production in 1952 was 648,000 tons. The estimated requirement in 1954 is 981,000 tons, and in 1955, 1,494,000 tons. We don't have equipment enough to increase our tonnage hauled by nearly a million tons a year. We expect that equipment will be self-supporting, self-liquidating. It will pay for itself.

Mr. JENSEN. Isn't it a fact that with present equipment you are able to haul everything that you should haul?

Mr. HINMAN. We have been able to haul all we have had to haul up to now, but we would not be able to haul the additional coal which will be required in new plants, which are already under construction, to burn this coal. At Fort Richardson, and the Air Force bases——

Mr. DAVIS. The development of this Alaska coal industry is probably the most industrial development going on in Alaska at this time. We have exerted all the pressure to encourage the development of local industry and use of local products in Alaska. The military in planning heat and power installations have specified coal installations in every case. Their own use of this coal is the principal thing for which we are trying to provide here.

EXPENDITURES FOR ROLLING STOCK IN 1953

Mr. JENSEN. Let us go back to the 1953 appropriation bill. We will insert into the record the list of rolling stock for which the Congress furnished the money to buy this year.

(The material referred to follows:)

Projects scheduled for fiscal year 1953

Schedule I. Construction and equipment for new power plant coal requirements, principally military installations:		
1. 3 1,500-horsepower diesel electric locomotives, lead units, 4-wheel trucks, at $180,000		$540,000
2. 3 1,500-horsepower diesel electric locomotives, booster units, 4-wheel trucks, at $175,000		525,000
3. 280 70-ton triple hopper cars, all steel, rebuilt		1,400,000
4. Freight facilities on Eielson branch:		
(*a*) Construct depot building, 25 by 50 feet, 2 stories high, first floor comprising freight room, waiting room, office, and toilets; second floor, 2 apartments for agent and operator. Estimated total cost, 2,500 square feet of floor at $36 per square foot	$90,000	
(*b*) Ballast, raise, regauge, and install tie plates on curve and reline 24,000 feet of track at $2.50 per lineal foot	60,000	
		150,000
Total, schedule I		2,615,000

Mr. JENSEN. Have you spent all that money? Have you done all those things?

Mr. HINMAN. We have the six locomotives in service. Substantially all of the 280 cars have been delivered and are in service, and most of the work on the Eielson branch has been done. The rest of

it will be done. The equipment has been purchased, locomotives are in service, and a substantial part of the cars. The rest are coming in every week.

Mr. JENSEN. Three million nine hundred and six thousand was appropriated in 1953 for improvements and equipment. On page 195 of the committee print you show $7,300,715 in 1953 for acquisition of assets—where is the extra money coming from. Did you buy equipment?

Mr. NUCKER. That money which is in excess of $3,900,000 appropriated in 1953 reflects, in a business-type budget, funds that were carried over from 1952 or taken from 1953 revenues.

Mr. JENSEN. For what purpose? For the same purpose?

Mr. NUCKER. Appropriated for the road project mostly in 1952. In 1952 we had not gotten any money for equipment.

Mr. JENSEN. Did you spend money for equipment which had not been appropriated in previous years?

Mr. NUCKER. We bought no equipment in 1952, none in 1953 other than that for which we received appropriations.

Mr. JENSEN. Did you spend any of the money for capital improvements?

Mr. NUCKER. Yes, sir.

Mr. JENSEN. Why didn't you show it in the budget? Why wasn't it spelled out in the budget request last year?

Mr. NUCKER. We need to and are working with the Department now to improve, for understanding's sake, this business-type budget presentation. This is the first year the railroad has presented a business-type budget. Each year the railroad spends some of its revenues, certain moneys for capital-type improvements, which is a normal part of railroading. No major improvements.

GENERAL ACCOUNTING OFFICE SURVEY

Mr. JENSEN. The General Accounting Office has issued a report to the committee on the survey which they made of the operations of the Alaska Railroad up till the fiscal year ending June 30, 1952. The report is quite lengthy. Have you seen that report?

Mr. NUCKER. Yes, sir. I have seen the report. The railroad has studied the report, and I have here a memo from the railroad voicing the railroad's views and comments on each of the items in the report, which I should like to submit.

Mr. JENSEN. We will insert in the record the first 5 pages of the report from the Division of Audits of the General Accounting Office.

GENERAL ACCOUNTING OFFICE,
DIVISION OF AUDITS,
Washington 25.

Hon. LINDSAY C. WARREN,
Comptroller General of the United States.

DEAR MR. WARREN: We submit herewith our report on a survey and review of the Alaska Railroad, an agency in the Department of the Interior, covering the fiscal year 1952. The comprehensive audit of the railroad will be made beginning with the fiscal year 1953.

ACTION BY THE ALASKA RAILROAD ON RECOMMENDATIONS OF THE HOUSE APPROPRIATIONS COMMITTEE AND ON RECOMMENDATIONS CONTAINED IN OUR PREVIOUS REPORT

The House and the Senate Committee on Appropriations were furnished for use in considering the 1953 budget for the Alaska Railroad a preliminary copy of the summary and recommendations embodied in the final report and survey of the Alaska Railroad which was subsequently transmitted to the Congress by the Comptroller General on April 3, 1952 (H. Doc. 415, 82d Cong.). The House committee in its report (H. Rept. 1628, 82d Cong.) concurred in certain of our recommendations with respect to the railroad's financial affairs, operating practices, and general management and stated that it felt they should be adopted immediately. Our observations of the action taken by the railroad on the recommendations follow.

1. A business-type budget.—It was recommended that the railroad be required to operate with a business-type budget to be submitted annually to the Congress for approval. Beginning with the 1954 fiscal year, the railroad is presenting business-type budget statements. However, this is only one requisite of a business-type budget operation. Our concept of a business-type budget is a financial plan which represents the consolidated judgment of management. Carrying out the plan after it has been approved becomes the responsibility of the heads of all of the operating departments. Periodic comparisons between actual and budgeted operating results are necessary to determine whether the plan is being realized. Deviations must be explained and changes may be required to attain the current objectives. Unless these steps are taken, the substance of this recommendation will not have been met.

2. Accounting.—It was recommended that the railroad continue its program for improving the accounting and reporting of its operations. We found no significant progress in this direction. Our previous report stated that the basic accounting structure of the railroad, established in conformance with Interstate Commerce Commission classification of accounts, was adequate. The principal weakness continues to be the failure to coordinate accounting efforts with those of other departments of the railroad and to implement the prescribed system. The railroad is not making effective use of its costly tabulating machine installation. Adequate accounting control over inventories of stores and supplies has not been established. The situation with regard to the accounts receivable of the railroad has grown worse—further time has elapsed since the date of the original billings. The periodic monthly financial statements are not available for use by the operating departments until at least a month after the close of the period. At that time they are of limited value for management purposes.

3. An adequate tariff structure.—It was recommended that the railroad establish a tariff structure for rail line and riverboat operations which would cover as nearly as practicable all costs, including depreciation, and a fair rate of return on the Government's investment. The railroad has activated its previous plans to equalize most rates between the ports of Whittier and Anchorage (62.5 miles) and between the ports of Seward and Anchorage (114.3 miles). Although the military traffic is over that segment of the line (Whittier to Anchorage) with the lowest operating costs, the Government is being required to bear the major burden of the increased rates. We question the adequacy of the present rates to cover the costs of operation and maintenance. In the first place, for the past 5 years the railroad has received from the Government, appropriations, in excess of revenues, totaling $75,500,000 to rehabilitate its property. As a result, ordinary repairs and maintenance have been kept to a minimum. Secondly, the railroad has followed a policy of deducting from operating expenses noncapital rehabilitation costs (deferred maintenance) parts of which are unsupported by specific documentary data. The Department of the Interior contends that, to provide for a fair rate of return on the Government's investment, rates would have to be increased to return approximately $2,000,000 in excess of costs—a step not considered by the Department to be defensible, at the present time. We do not express an opinion as to the validity of the Department's contention, but this amount is fairly in line with amounts paid for interest and taxes by railroad corporations with comparable revenues. Privately owned railroads obviously must meet these charges by providing an adequate rate structure.

4. Operation of McKinley Park Hotel.—It was recommended that the railroad consider the possibility of placing the operation of the McKinley Park Hotel under a concession contract. In June 1952, the railroad published an invitation for bid proposals for the furnishing, under terms of a 20-year contract, of food, lodging, transportation, entertainment, and other facilities and services needed

by the visiting public and others at Mount McKinley National Park. Four proposals were received at the date established for the bid opening—September 10, 1952. The most attractive from a financial standpoint was an offer to pay to the railroad $1,000 flat annual ground rent plus 1 percent of gross revenues to $500,000 and 1½ percent thereafter. This offer is based on the premise that many additional facilities within the park will have to be developed in order to make a successful financial venture possible. The scope of the proposal, however, exceeds the limits of the railroad's jurisdiction because facilities within the park were included. The McKinley Park is under the jurisdiction of the National Park Service.

5. Power facilities at Anchorage.—It was recommended that the railroad make arrangements to divest itself of the steam power facilities operated in Anchorage. As a result, in May 1952 the Secretary of the Interior assigned to the Bureau of Reclamation the responsibility for operating the combination diesel-steam power generating plant. Under the terms of a memorandum of understanding between the railroad and the Bureau, the railroad will complete construction of the plant, retain ownership of the facilities, and advance funds to the Bureau for operation and maintenance of the plant. Revenues collected by the Bureau from the Chugach Electric Association, Inc., a cooperative, for its share of operation and maintenance costs and other charges, and from the sale of the railroad's surplus electric power and process steam, will be deposited to the credit of the railroad. In our opinion this plan does not comply in full with the committee's recommendation that the railroad make arrangements to divest itself of steam power facilities operated in the Anchorage area."

6. Manual of orders.—It was recommended that a manual of orders be prescribed covering the administrative and operating policies in which the authorities, responsibilities, and duties of the departments and offices of the railroad are adequately and clearly stated. In July the railroad completed a draft of a manual outlining functions and responsibilities of each department. This draft was in essence a brief résumé of the general activities engaged in by each department head or supervisor. In our opinion the draft does not adequately fulfill the requirement or an operating manual.

7. Messing facilities.—It was recommended that the railroad make a periodic review of prices charged to employees and others using the messhouses for the purpose of determining whether these operations are as nearly self-sustaining as possible. Messhouse prices have not been changed since our previous report, and the messhouses continued to operate at a substantial loss. In May 1952 the railroad published a call for bids for a 5-year lease of hotels, dormitories, messhouses, camps, and outfit cars for the furnishing of meals and lodging to railroad employees and the public. One proposal was received at the date established for opening of bids—September 10, 1952. This offer was a cost-plus-management-fee proposition, and the railroad considered that it did not provide sufficient evidence of benefits to warrant an award.

8. *Commissary facilities at Anchorage.*—It was recommended that commissary facilities at Anchorage be abolished. Positive action had not been taken on this recommendation at the completion of our fieldwork.[1]

Mr. HINMAN. I have a letter which embraces everything in the General Accounting Office report, and also embraces a letter which the General Accounting Office wrote to the railroad's General Manager. I have another letter communication which specifically deals——

Mr. JENSEN. Just a minute. Is the General Accounting Office report on pages 1 to 5, inclusive, also set out in your answer?

Mr. HINMAN. Yes, sir.

Mr. JENSEN. All—entirely?

Mr. HINMAN. Yes, sir; pages 1 to 3 and the first paragraph of page 4, deals with those first 5 pages.

Mr. JENSEN. It is copied word for word?

Mr. HINMAN. No, sir. These are our comments.

Mr. JENSEN. Now I will insert in the record the letter to Mr. Davis, Director of the Office of Territories, Department of the Interior,

[1] We have been informed that the Railroad has subsequently discontinued the operation of the cold-storage department of the commissary.

Washington 25, D. C., from Mr. J. P. Johnson, General Manager of the Alaska Railroad in explanation of the report which is made by the General Accounting Office to which I have referred.

(The letter referred to follows:)

Subject: Report of survey and review of the operations, Alaska Railroad, fiscal year 1952.

MARCH 5, 1953.

Mr. J. P. DAVIS,
Director, Office of Territories,
Department of the Interior, Washington 25, D. C.

MY DEAR MR. DAVIS: The following comments are made with respect to the subject report, copies of which have been submitted to your office. Your office has also been supplied with copy of the letter referred to on page 6, which was addressed to me under date of January 23, 1953, by Mr. Stephen B. Ives, Associate Director of Audits, General Accounting Office. We will first deal with the items mentioned in the report to the Comptroller General.

A. ACTION BY THE ALASKA RAILROAD ON RECOMMENDATIONS OF THE HOUSE APPROPRIATIONS COMMITTEE

1. A business-type budget.—It was recommended that the railroad be required to operate with a business-type budget to be submitted annually to the Congress for approval.

We have submitted budget estimates for fiscal year 1954 in accord with the plan suggested. Our financial plan for 1954 has shown the probable income from and expenses estimated separately by major activities, rail-line operations, river-boat operations. The budget proposed represents the consolidated judgment of management. A similar financial plan was prepared for fiscal year 1953, and comparisons between actual and budgeted operating results have been made for the 6-month period ended December 31, 1952.

2. Accounting.—The railroad has continued its program for improving the accounting and reporting of its operations. Our monthly financial and statistical reports are on a current basis comparing favorably with stateside railroads. As the result of changes in supervisory personnel, we are making more effective use of tabulating-machine equipment. However, further improvement should be manifest before the end of the current year. We have experienced much difficulty in recruiting qualified personnel with a knowledge of the uniform system of accounts for railroads as prescribed by the Interstate Commerce Commission. An extensive training program has been carried on for the past 5 years with very good results. This program will be vigorously pursued.

Early in 1948 we established procedures for appropriate inventory of stores and supplies. These procedures follow the practices in the railroad industry. We have, however, been unable with personnel available to fully implement these procedures. We have not yet reconciled physical inventory values or costs with our recorded ledger balances. Because of the proportionately larger inventory due to the time required in shipping, we are faced with a much greater problem than is the case with stateside railroads. We have made substantial progress and will continue our efforts toward adequate accounting control over inventories. This end should be accomplished before the end of fiscal year 1954.

Considerable progress has been made toward liquidating old accounts receivable. On their next visit representatives of the Audits Division will find substantial improvement.

A comprehensive accounting manual is in the course of preparation. When completed it will be submitted to the Comptroller General for approval.

3. An adequate tariff structure.—The railroad has revised its tariff structure. Some rates were increased and others decreased. The general level was increased and to a large extent rates through the two ports Whittier and Seward were equalized. We believe our tariff structure has been revised so as to closely follow the pattern accepted in the railroad industry. In the current fiscal year we anticipate a substantial net income after depreciation.

4. Operation of McKinley Park Hotel.—With a view toward placing the operation of the McKinley Park Hotel under a concession contract invitation for bid proposals were issued. The invitation was drawn up in cooperation with the National Park Service because it was considered that of necessity a concession contract need embrace more than the operation of the existing hotel facility. One proposal was received which it appears would be in the Government's interest to accept.

The matter now rests with the National Park Service where further investigations, including the financial responsibility of the bidder, are being conducted. In the event that a contract can properly be entered into the railroad will release all of its McKinley Park Hotel facilities to the Park Service.

5. Power facilities at Anchorage.—Although the railroad retains part ownership in the steam and diesel powerplant known as the Knik Arm powerplant at Anchorage, Alaska, the plant is being operated by the Bureau of Reclamation for the railroad's account. The plant is owned jointly with Chugach Electric Association, Inc., a cooperative financed in part by the Rural Electric Administration.

The railroad's purpose in entering into this arrangement was to assure it adequate power for its extensive shops, warehouses, and other terminal facilities at Anchorage. An adequate source did not exist and this joint project offered the most practical solution. Steam heat and electric energy is now available to the railroad in adequate supply and at reduced cost.

6. Manual of orders.—In addition to the accounting manual previously mentioned, the railroad has in course of preparation a manual covering administrative and operating policies. The authorities, responsibilities and duties of the departments and offices of the railroad will be adequately stated. It is anticipated that this manual will be completed during 1953.

7. Messing facilities.—Our messhouse operations are given constant close supervision with a view to make them as nearly self-sustaining as practical. We hope to attain this end by reducing our costs rather than by further increasing the prices charged our employees. In 1950 our average cost per meal was approximately $1.71 for which employees were charged 75 cents or a loss of 96 cents per meal. In 1952 the average cost had been reduced to approximately $1.60 and the price charged employees increased to $1.25 or a loss of 35 cents per meal. These meals are made available to employees at isolated line points only, and we do not believe an increase in price is justified. Employees located in urban areas such as Seward, Anchorage, Palmer, and Fairbanks where public facilities are available must avail themselves of those facilities.

8. Commissary facilities at Anchorage.—Our commissary sales to employees have been very sharply curtailed. Such sales totaled $275,524.72 during the last 3 months of 1951 but had been reduced to $148,327.55 during the same period in 1952. The sale of meats, poultry, fish, frozen fruits and vegetables, and other cold-storage items have been discontinued insofar as employees located in urban areas are concerned. The sale of wearing apparel (this was principally work clothing) is being discontinued as our stock on hand becomes exhausted. Further curtailments will be made as rapidly as practical. To the extent that our Anchorage commissary facilities are used to supply our messhouses and hotels as well as employees located at certain isolated points, it does not appear that they can be abandoned for some time.

B. NEED FOR A COORDINATED PLAN FOR GOVERNING TRANSPORTATION

We concur in the expressed opinion that the need exists for the creation of a distinct or interdepartmental transportation authority for the Territory of Alaska. Such action was recommended by the Committee on Interstate and Foreign Commerce in its report (H. Rept. 1272, 80th Cong.), dated January 26, 1948, entitled "Transportation in Alaska."

It does not appear appropriate for the Alaska Railroad to suggest the form in which such an "authority" should be set up. Regulation of the rates, load limits, and operating practices of privately owned motor carriers which are competitors of the railroad owned and operated by the United States Government should not be placed in the hands of an authority which might primarily be interested in the success of the railroad's operations. Similarly, the private operators should not be permitted to operate without regulation unless the railroad be permitted to operate on a competitive basis, including the fixing of competitive rates and establishment of competitive services.

RECOMMENDATIONS TO THE ALASKA RAILROAD

In the report to the Comptroller General, which was transmitted to the Speaker of the House of Representatives, reference is made to 10 items as representing the principal recommendations. In the letter to the railroad from the Division of Audits, General Accounting Office, 22 subjects were discussed, some in quite general terms. We desire to deal with each of these subjects in the comments which follow.

1. *A business-type budget.*—This subject has been dealt with under A–1.

2. *Timely monthly operating statements.*—It is recommended that our monthly operating statements be prepared by our accounting department and made available for review by responsible officials by the 10th business day following the close of the current reporting period. To accomplish this end, it is recommended that "a precise degree of accuracy should be sacrificed. * * *" Our monthly operating statements and balance sheet are scheduled for issue not later than the 25th of the next subsequent month. We are now meeting that schedule and it compares favorably with the practice followed by the railroad industry. Preliminary estimates are available to top management within a few days after the close of each month. To accomplish the schedule suggested would require that substantially all of the accounting records be stated on the basis of estimates, would require additional clerical help which we can ill afford and also permit of a "juggling" of the financial reports which cannot be tolerated.

3. *Revision of accounting processes.*—This subject has been dealt with under A–2.

4. *Need for a collection policy.*—This subject has been dealt with under A–2.

5. *Inventory control.*—This subject has been dealt with under A–2.

6. *Simplified disbursing procedures.*—The new simplified disbursing procedures authorized by the Comptroller General (B–48121, dated November 6, 1951) were adopted July 1, 1952. The changes, coming at our busiest season and when our accounting staff was beset by numerous requests from Division of Audits representatives, caused some confusion. We have taken advantage of savings afforded by the new procedures and will seek further savings.

7. *Job standards.*—We believe that positions in those departments of the railroad where professional or technical skills are required are manned by well qualified personnel. It has been the policy of the management to secure the best available official and top supervisory staff with broad experience and, where essential, the necessary formal education. In our opinion the representatives of the division of audits who visited the Alaska Railroad are not themselves entirely qualified to judge the qualifications of all of the official and supervisory staff of the railroad.

8. *Financial management.*—It was suggested that a need existed for the position of comptroller. The assistant to the General Manager performs the functions of comptroller and reports directly to the General Manager. The position of chief accounting officer was a temporary position set up on a temporary basis for the purpose of engaging a specialist to initiate the system of accounts that would conform with the accounting practices prescribed by the Interstate Commerce Commission. Upon the recommendation of that Commission a Mr. Albert E. Wallace was engaged, held the position for a little more than 5 years and has since retired. The position no longer exists. The accounting department is headed by a general auditor who reports to the assistant to the General Manager. The latter officer does perform some functions which might not ordinarily be assigned to the comptroller of a large railroad but in the case of the Alaska Railroad there appears to be no need at present to enlarge our official family.

9. *Organization along functional lines.*—The fullest consideration will be given to improving the organization structure of the railroad. We do not concur in the recommendations that:

(a) Hotel, commissary, and housing operations should be under supervision of the director of personnel.

(b) McKinley Park Hotel should be under direct supervision of the Assistant General Manager.

All of the recommendations will be carefully considered and, to the extent practical, will be adopted.

10. *Consolidation of function of counsel and real estate offices.*—We concur in this recommendation and have in fact consolidated the work although changes in personnel have not yet been effectuated because of an impending vacancy in the position of counsel.

11. *A manual of orders.*—This subject has been dealt with under A–6.

12. *Imputed costs.*—This deals primarily with the fixing of an appropriate rate structure which has been dealt with under A–3.

13. *Real estate policy.*—A comprehensive statement of the railroad's policy and procedures with respect to the real estate activities in which it engages will be included in the manual of orders dealt with under A–6.

14. *Policy with respect to liquidated damages.*—Each instance where consideration of this matter may be required needs to be dealt with on its own merits. This requires the careful consideration of the contracting officer and counsel. The statement of policy is simple—if liquidated damages are proper they should be assessed if not proper they should not. That is and has been the railroad policy.

15. Authorization for capital expenditures.—Requests for approval of "Authority for Expenditure" (AFE) are currently submitted to and approved by the management prior to the ordering of materials, award of contract or commencement of work. In the case of an emergency, authority to proceed is given by the management in advance of the preparation of the formal request. Although there were a number of instances in prior years when prescribed procedures were not adhered to that condition has now been corrected.

16. Advertising policy.—Our advertising policy has been critized but no specific recommendations were made. We are constantly endeavoring to accomplish economical and effective advertising. Our advertising costs in fiscal year 1952 were less than one-tenth of one percent of our gross income.

17. Interest-free loans to employees.—The railroad does not make loans to employees but instead permits payroll deductions on a semimonthly basis to reimburse the railroad for hospital and medical fees due from employees' dependents. To relieve the railroad of the cost of furnishing free medical and hospital care to its employees, we have recommended that the Executive order which requires this service be canceled.

18. Narcotics control.—The railroad has turned over to the appropriate Federal authorities what was an excess supply of heroin. This excess supply was not purchased but was acquired from war surplus without exchange of funds in lot shipments with other needed drug and medical supplies.

19. Free transportation.—The issuance of free transportation is limited to that specifically authorized by statute and to those persons engaged on matters directly related to the railroad's transportation business. Passes issued to Alaska Steamship Company agent and financial examiner of the Department of the Interior were for use in connection with the railroad's operation. Inclusion of the steamship agent's wife was perhaps in error. Passes issued to certain representatives of the United States, Bureau of Mines, military establishments, and Fish and Wildlife Service are for use in connection with activities of benefit to the railroad and result in savings to the Government. The practices with respect to the issuance of free passes will be closely watched and in the future a precise record will be maintained showing the purpose for which such passes are issued.

20. Bus concession at McKinley Park.—The contract for the concession to operate buses between McKinley Park Hotel and points within Mt. McKinley Park, in our opinion, was due to the best interest of the Government. It provided for an equal sharing of the profits or losses which gave the railroad the benefit of more economical operations due to the nature of the contractor's regular business and his ability to hire well qualified operators at regular monthly salaries, while it had previously been necessary for the railroad to pay excessive overtime wages to employees not properly qualified. No other operator held the necessary franchise from the Territory of Alaska. The operation by the contractor was eminently successful, however, in the event the railroad continues operation in the park another season this feature will be carefully examined prior to the extension of the previous arrangement or entering into a new contract.

21. Excessive records and files.—Practices and procedures in this connection will be very carefully reviewed during the preparation of our accounting manual and manual of orders discussed under A-6. We will appreciate it if, during the progress of any future comprehensive audit or survey by the division of audits, we be given the advantage of specific recommendations.

22. Costs of construction of joint power plant.—Negotiations have been in progress for some time and are continuing between the railroad, Chugach Electric Association and the Rural Electrification Administration concerning the division of construction costs. The matter of interest and insurance costs is being carefully considered.

In closing permit us to thank the representatives of the division of audits for their splendid cooperation during their survey of the railroad's operations. It is a fact that the midsummer months are a very busy season on the railroad. Our ordinary workload is at a peak and in addition the closing of accounts for the fiscal year is in progress. While weather conditions are not quite as pleasant in Alaska in the winter months, it would be of great aid were it possible to conduct comprehensive surveys or audits in the slack season, say January, February, and March.

Sincerely yours,

J. P. JOHNSON, *General Manager.*

Mr. JENSEN. Do you have a further statement you wish to insert in the record at this point?

Mr. HINMAN. It repeats some things in a general way.

Mr. JENSEN. You say it is along the general line of Mr. Johnson's letter to Mr. Davis under date of March 5?

Mr. HINMAN. Yes.

Mr. JENSEN. Does this statement elaborate on Colonel Johnson's letter to Mr. Davis?

Mr. HINMAN. No, this one specifically refers to the recommendation made last year by the General Accounting Office. This was specifically an answer to the committee's recommendation last year.

(Discussion off the record.)

SEWARD DOCK

Mr. NORRELL. Page 160 of the justification shows three items. Permanent improvement for the railroad, $9,094,000. That is the budget estimate. The new revised estimate withdraws that recommentation, is that right? No. 2, there is the construction of the docks, $4,498,000; I understand that has been withdrawn, also.

Is it your recommendation to the committee that the existing docks should not be repaired, that we should either construct a new one, as proposed, or let the matter go over for further consideration, is that right?

Mr. DAVIS. That is on the assumption that the railroad will continue permanent operation into Seward. If we consider it on an emergency basis without assurance as to permanence, I think we would want to reconsider that.

Mr. NORRELL. It was your idea that the old dock should not be rehabilitated?

Mr. HINMAN. That is correct.

Mr. NORRELL. There isn't much military equipment going into those docks?

Mr. HINMAN. No, but we handle 425,000 tons of other freight out of Seward.

DOCK EARNINGS

Mr. NORRELL. Do you keep a separate record of earnings for the docks there?

Mr. HINMAN. Yes, sir; we do.

Mr. NORRELL. Do you know the amount of earnings? Do you have that for some period?

Mr. HINMAN. Seward dock earnings for fiscal year 1952 were $1,024,554 and for the first 7 months of 1953 were $530,272.

RAILROAD INCOME

Mr. NORRELL. Looking back to page 168—the last item, "Equipment for new powerplant coal requirements." As I understand it, that is still in?

Mr. NUCKER. That is correct, sir.

Mr. NO RELL. What was the total income of the railroad for the year 1952?

Mr. HINMAN. $19,413,750.32.

Mr. NORRELL. What part of that would be military and what part civilian?

Mr. HINMAN. We would not have that. The only way to determine it would be on the pro-rata basis. I would say about 60 percent of it for military tonnage.

Mr. NORRELL. You used revenue in the operation of the railroad?

Mr. HINMAN. Yes, sir.

Mr. NORRELL. Is there ever going to be any way we can ultimately get this road on a self-sustaining basis?

Mr. HINMAN. For the first 7 months of the current year we had a net income of three-hundred-and-some-odd thousand dollars, after providing $900,000 for depreciation. That compares with a deficit of over $300,000 for the same period in 1952.

Mr. DAVIS. There has been no operating deficit on the railroad since 1939. It has paid its way.

Mr. NORRELL. You have collected enough money from the operation of the railroad to meet its expenses?

Mr. DAVIS. Yes, sir.

Mr. NORRELL. That would not take into consideration the eighty-nine or so millions of dollars for initial construction and for rehabilitation.

Mr. HINMAN. No; the rehabilitation program has been financed by Congress.

Mr. NORRELL. There is no way that the matter can be handled in the future so that the income will be sufficient to rehabilitate the road, resupply worn-out equipment, and make it self-sustaining?

Mr. DAVIS. We see no reason why the railroad cannot meet its expenses under normal economic conditions, and our entire thinking is based upon that. We have concurred in the recommendation of the Bureau of the Budget that it be placed on a corporation basis with interest payments to the Treasurer, and other features.

Mr. NORRELL. As friendly as I am to Alaska, I do think the railroad ought to get to the point where it would have enough money to resupply the worn-out equipment and rehabilitate the road from time to time as the need may be.

RAILROAD RATES

Mr. DAVIS. The railroad rates have not been increased since 1937. There have been some adjustments and in some cases there have been increases to correct inequities.

Mr. NORRELL. We had quite an argument about that last year.

Mr. DAVIS. There was an adjustment of rates last fall. During those years, the railroads of the United States have had their rates increased approximately two-thirds, about 65 percent and Canadian railroads have increased their rates 98 percent according to an item I saw yesterday in the New York Times.

Mr. NORRELL. I'll bet you there has not been a similar project in the world like this one where a government spent about $90 million and still we are not in sight of a self-sustaining operation. I think that has been because you have not raised your revenues as you should.

Mr. DAVIS. I think the railroad is now on a self-sustaining basis. We have no idea that there are operating deficits——

Mr. NORRELL. We pay a man a differential of 25 percent to work in Alaska over and above the salary he might get here in the United States. Yet when you carry something on the railroad, you carry it cheaper than you can carry it anywhere else in the United States.

Mr. DAVIS. That isn't quite the case. The rates have not been increased. They were relatively quite high compared to the United States. At the present time they are somewhat above equal distance hauls in the United States, but not very much above. But they are stabilized. They have not been increased in 15 years.

Mr. NORRELL. At least they are not subsidized by the Government?

Mr. DAVIS. No; they have not been.

DISPOSAL OF RAILROAD TO PRIVATE ENTERPRISE

Mr. JENSEN. Has any private concern or railroad company in America or elsewhere made any gestures toward the purchase of the Alaska Railroad?

Mr. DAVIS. Not to my knowledge.

Mr. JENSEN. Don't you think that the Alaska Railroad is now developed to the point where it could be disposed of to private enterprise?

Mr. DAVIS. I have some misgivings about that as a policy for two reasons: One, that I would say the railroad has primary importance in three different areas, one in the military field. It is the backbone of the strategy of the corps in Alaska. It is the center of all military thinking and the railroad is absolutely essential to any planning of a military character there. The military program provides about 60 percent of the tonnage now in use. The other is that I think the railroad is still and should be for a long time to come, one of the most important agencies in the general development of Alaska coal fields, McKinley Park—all the things the Government may make a general matter of policy, more or less revolve around the railroad. There is the third point of providing transportation in the sense that railroads in this country provide, that is in the ordinary civilian sense. I think you would want to give consideration to all those things.

Mr. JENSEN. All those things you have just explained and enumerated, could be done, and have been done by private industry. I believe it could do them and possibly better, and alleviate the responsibility which the taxpayers of America have in connection with that Alaska Railroad. It could be put up for sale with certain provisions to make sure that private industry would give the proper service to the military. It could be disposed of on either a cash basis or on such a financial basis that it would bring money into the Federal Treasury, which is needed so badly now. I fail to see why the Federal Government should continue to own that railroad. The Government does not own the railroads in this country. It is true we had to be mighty liberal with the railroads in order to get them to run their tracks all over America in the early days. We have done the same thing for Alaska pretty well. I think that the time has come when we should be thinking about disposing of that railroad to private industry.

Mr. DAVIS. I certainly would not disagree with you if that could be done with due regard to the Government's interest in it, the investment that has been made, and due regard to the public welfare, it

would be a desirable thing to do. My question is as to whether you could get any private group to take it over on terms that would meet those conditions. If you could, I think it would be the proper thing to do.

Mr. JENSEN. I think it is worth looking into. It has been a costly thing. Of course, you are well acquainted with my thinking. The Government should be in business only where they absolutely have to be in business for the good of all the people.

Mr. DAVIS. I do not disagree with that in the slightest degree.

Mr. JENSEN. The quicker we can get the Government out of business that it does not have to be in, the better it will be for the taxpayers of America, and for the future of America, so I hope that in the very near future we can publicize the fact that Uncle Sam might sell the Alaska Railroad. Then we will see whether or not anyone is interested in the purchase of it with money which we can put into the United States Treasury.

VIRGIN ISLANDS PUBLIC WORKS

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$992,970	$1,099,680	$1,100,000
Prior year balance available:			
Appropriation	1,552,445	586,038	
Contract authorization	1,467,000	1,462,405	
Returned from Department of Commerce, Bureau of Public Roads	23,109		
Total available for obligation	4,035,524	3,148,123	1,100,000
Balance available in subsequent year:			
Appropriation	—586,038		
Contract authorization	—1,462,405		
Obligations incurred	1,987,081	3,148,123	1,100,000

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
1. Construction of projects	$1,949,772	$3,048,123	$1,000,000
2. Administration	37,309	100,000	100,000
Obligations incurred	1,987,081	3,148,123	1,100,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	14	16	16
Average number of all employees	9	15	15
Average salaries and grades:			
General schedule grades:			
Average salary	$5,200	$5,053	$5,096
Average grade	GS-7.9	GS-7.2	GS-7.2
Crafts, protective, and custodial grades:			
Average salary	$2,420	$2,420	$2,420
Average grade	CPC-2.0	CPC-2.0	CPC-2.0

Obligations by objects—Continued

	Object classification	1952 actual	1953 estimate	1954 estimate
01	Personal services:			
	Permanent positions	$44,170	$74,950	$75,495
	Regular pay in excess of 52-week base	201	329	331
	Payment above basic rates	8,113	10,621	10,674
	Total personal services	52,484	85,900	86,500
02	Travel	2,971	5,000	4,000
03	Transportation of things		100	100
04	Communication services	812	1,200	1,000
05	Rents and utility services	93	300	200
06	Printing and reproduction	334	600	500
07	Other contractual services	1,225	2,200	1,800
08	Supplies and materials	641	1,000	800
09	Equipment		3,000	5,000
10	Lands and structures	1,928,443	3,048,723	1,000,000
15	Taxes and assessments	78	100	100
	Obligations incurred	1,987,081	3,148,123	1,100,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$1,114,320	$1,476,519	$1,157,642
Obligations incurred during the year	1,987,081	3,148,123	1,100,000
	3,101,401	4,624,642	2,257,642
Deduct:			
Unliquidated obligations, end of year	1,476,519	1,157,642	757,642
Obligations transferred to "Virgin Islands public works (liquidation of contract authorization), Office of Territories"		1,467,000	
Total expenditures	1,624,882	2,000,000	1,500,000
Expenditures are distributed as follows:			
Out of current authorizations	1,624,882	500,000	500,000
Out of prior authorizations		1,500,000	1,000,000

Mr. JENSEN. The next item is "Virgin Islands public works." Will you give your full name for the record?

Mr. WHEELER. Dan H. Wheeler, Assistant Director, Office of Territories.

PROGRAM STATUS

Mr. JENSEN. Your 1954 request, I note, and I should say I gladly note, is $2,048,123 less than it was last year. You are asking in this budget request for 1954 for $1 million for public works, and $100,000 for administrative cost.

Will you tell us just what the status is now of your public-works program in the Virgin Islands, what you have spent the money for up to date, the money that Congress has already appropriated, and what you propose to spend this $1 million for in the fiscal year 1954.

Mr. WHEELER. This program was transferred to the Department of the Interior from the General Services Administration on the 24th of May 1950. At that time the program had installed potable water systems on both St. Thomas and St. Croix. They had installed two systems. They had installed salt-water fire-fighting systems on both islands, and they had installed an abbatoir on St. Thomas. We have since installed telephone systems on each of St. Thomas and St. Croix and we are constructing a harbor improvement on St. Thomas. Two years ago we were asked to use the money that was

then available to supply hospital needs on the islands and to go from there to a school program. The hospitals are just about to be completed.

There is a 60-bed hospital at Christiansted on St. Croix, and there is a 12-bed health facility at Frederiksted on St. Croix. There is a 116-bed hospital at Charlotte Amalie on St. Thomas, and there is a 4-bed health facility on St. John. I have here some pictures that I would like to pass around to you showing these hospitals.

Those are the hospitals that I am sure will all be completed within the next 60 days.

SCHOOL PROGRAM

Then, with last year's money we designed a school program, and that program is estimated to cost $6,913,000. With the money that we had from last year we were able to allot money for 2 high schools, 1 at Charlotte Amalie on St. Thomas, and 1 at Christiansted on St. Croix, altogether at a cost of $2¼ million. That is the construction cost. We have $2,497,000 which will see the completion of both of these high schools as usable units.

Now, we asked for bids on more than that. We asked for bids on a high school on St. Thomas, a combination high school and grade school at Christiansted on St. Croix, for renovation and additions to some elementary schools on both. When the bids came in the first time we thought they were too high, and did not accept any of them. By the time we got an additional appropriation we were ready to build more schools, but bids still came in at about the same level. We awarded to one this contract for two high schools for $2¼ million dollars.

Now, that will not supply any equipment for those schools, but if the worst comes to worst they could install the old equipment in them from the buildings that they are now using. We hope that will not be necessary.

USE OF 1954 FUNDS

Part of the money that we are asking for this year will be for equipment for those schools.

The other part of the $1 million we are asking for this year would be to build that elementary school on St. Croix which we threw out when the bids were too high, and to renovate an elementary school on St. Croix, to renovate four elementary schools on St. Thomas, and to renovate four elementary schools on St. John.

Now, those elementary schools are all rural schools, and the $1 million would be used for the purpose I have indicated, of which $461,500 would be for that elementary portion of the school we threw out when the bids came in high.

Mr. JENSEN. What part of the cost of these schools do the taxpayers of the Virgin Islands shoulder?

Mr. WHEELER. None.

Mr. JENSEN. None?

Mr. WHEELER. No, sir; it is a completely federally financed program, unlike that in Alaska.

Mr. JENSEN. So, there is no tax whatever levied against the private property in the Virgin Islands to build these school facilities?

Mr. WHEELER. That is right, sir.
Mr. JENSEN. Who pays the teachers?
Mr. WHEELER. The Government of the Virgin Islands.
Mr. JENSEN. The people of the Virgin Islands pay the teachers?
Mr. WHEELER. Yes, sir.
Mr. JENSEN. And the hospitals are built with Federal money?
Mr. WHEELER. That is right, sir.
Mr. JENSEN. That is, taxpayers of America pay the bill?
Mr. WHEELER. Yes, sir.
Mr. JENSEN. Who pays for the doctors?
Mr. WHEELER. The Government of the Virgin Islands.
Mr. JENSEN. Going back to the schools for a minute.
Mr. WHEELER. Yes, sir.
Mr. JENSEN. After these schools which are now under construction are built, and your school-building program is completed, will there be school facilities and teachers for all the children in the Virgin Islands who want to go to school, who can go to school, and who should go to school?
Mr. WHEELER. We think that is so, yes, sir; that they will all be accommodated when the whole program is completed.

HOSPITAL PROGRAM

Mr. JENSEN. When this present hospital-building program is completed do you feel that there will be sufficient hospital facilities on the Virgin Islands to take care of the people as hospitals should take care of them?
Mr. WHEELER. We think that there will be. Some of the old hospital facilities will be available for any other institutional use that is necessary.
Mr. JENSEN. What is the average charge per day for private hospitalization in the Virgin Islands?
Mr. WHEELER. That would be the merest hearsay on my part, Mr. Jensen. I do not know the answer to that, but I think it is $7 or $8 in the Virgin Islands, whereas, here in the District of Columbia, for example, the Community Chest in taking care of indigents, pays something over $14 a day, and I think that the average for all patients is very much above that.
Mr. JENSEN. All right, what facilities are there to take care of the indigent sick people in the Virgin Islands?
Mr. WHEELER. These hospitals will take care of both the indigent and the pay patients.
Mr. JENSEN. In the same hospitals?
Mr. WHEELER. Yes, sir.
Mr. JENSEN. In other words, there is no public-welfare hospital, so to speak, that takes care of the indigents in a separate place?
Mr. WHEELER. This will take care of both indiscriminately, and the Governor has recently, I do not know what the status of his study is, but the Governor has recently inaugurated a study of that and concluded, I believe, to take up with the local council the matter of setting rates on the basis of ability to pay. When that shall have been ascertained, charges will be based on the ability to pay for those who cannot pay the full bill for their care.

UNFINISHED PROJECTS

Mr. JENSEN. What other public works are there in the Virgin Islands that are under your jurisdiction?

Mr. WHEELER. There are some things to be finished up, just minor things.

Mr. JENSEN. For instance what?

Mr. WHEELER. The installation of a couple of valves, for example, on the water system.

Mr. JENSEN. Repairs and rehabilitation?

Mr. WHEELER. They are not that; no, sir. They are original installations that should have been made when the project was built, but they have not been up to now. The communications systems are being finished up and are furnishing service right now.

In fact, everything in the public-works program is in use with exception of the hospitals, and the waterfront project will probably be finished up in about 4 months.

There are some things still to do. This project is the installation of a bulkhead and the capping of that steel bulkhead with concrete.

Mr. JENSEN. Did the private property owners pay for any part of that seawall?

Mr. WHEELER. No, sir.

Mr. JENSEN. Why should they not?

Mr. WHEELER. They gave, without charge, all of the necessary easements to accommodate that project, but there was no payment asked, and the basic bill did not contemplate any participation by other than the Federal Government in this program.

TAXATION

Mr. JENSEN. And no revenues are received through the taxation of private property because of that improvement?

Mr. WHEELER. Well, I suppose, Mr. Chairman, that such improvements as might occur to private property will be reflected in current assessments and the tax rate will apply to the new assessment, whatever that may be.

Mr. JENSEN. How often do you have property-tax revisions down there?

Mr. DAVIS. Under the present system, Mr. Chairman, the tax assessor is supposed to readjust property values, if there is occasion for it, at any time. There has been considerable controversy in the islands over that.

As the Governor pointed out, in his testimony here the day before yesterday, he has met very strong opposition in increasing taxes on a realistic basis as these improvements are made and as property values rise in the islands.

DISPOSITION OF OLD HOSPITAL BUILDINGS

Mr. WHEELER. Dr. Fenton, you were not in the room when I passed those pictures around. Those are the pictures of all of the hospitals except the one on St. John, which is a four-bed health facility.

There is a hospital at Charlotte Amalie on St. Thomas, 1 at Christiansted on St. Croix, and a 12-bed health facility at Frederiksted on

St. Croix, which will all be completed within the next 60 days, and ready for occupancy.

Mr. FENTON. That certainly is a transformation compared to what we saw when we were down there.

Mr. MARX. The prettiest one is of St. John, but the pictures did not turn out well on that one.

Mr. FENTON. You are getting several new hospitals then.

Mr. WHEELER. Yes, that completes the hospital program.

Mr. FENTON. What is the capacity of the hospital at St. John?

Mr. WHEELER. There is a 116-bed hospital at St. Thomas. Christiansted has 60 beds, and Frederiksted has a 12-bed health facility rather than a complete hospital, and the 1 on St. John is 4 beds of the same variety.

Mr. FENTON. Are you using any of the old buildings in connection with these new hospitals?

Mr. WHEELER. I am not sure what their plans are for the use of those old buildings, but there has been discussion of the fact that they might be used for other institutional care if they are necessary.

As I told the chairman, the plan is to take care of the ill, both indigent and pay patients, and we think that this capacity will be sufficient to do that, except, possibly, for elderly people—a home for the aged. If they have the necessity of supplying care of that kind beyond the capacity of what they have been using they might use some of the old buildings, but some of them were in pretty bad shape.

Mr. JENSEN. Now, you have those old hospitals and they have been used for 100 years or more.

Mr. WHEELER. I should not be surprised if that is so.

Mr. JENSEN. And there have been patients in those hospitals with every kind of disease that one could imagine. They are terrible-looking things. They certainly must be full of every kind of germ that you could imagine.

Mr. WHEELER. Yes.

Mr. JENSEN. I am going to ask you, Dr. Fenton, would it be possible for a patient who goes into one of those old hospitals now to contract a disease from his being kept in one of those rooms; is that possible?

Mr. FENTON. Well, as we saw the situation when we were there, particularly in the case of the poor mental cases, it was terrible.

Mr. WHEELER. I agree with you on that.

Mr. JENSEN. It was heartbreaking.

Mr. FENTON. And anything could happen there.

Mr. JENSEN. I mean contracting disease where germs could be left.

Mr. FENTON. Well, I believe, Mr. Chairman, that we have pretty good medical people there who will try to prevent that sort of thing.

Mr. JENSEN. You mean fumigating and disinfecting it so that there will be no danger of a person going in there and contracting a disease of another person who had been in that room? I do not mind telling you that I wish those buildings were torn down.

Mr. WHEELER. That is what we are thinking of, tearing them down in place of using them, and you are wondering whether, if they are used as an old folks' home, if some of those people would catch diseases.

I think the care they have given them in that respect is pretty high grade. Of course, some of them were pretty difficult to take care of. The floors were far from smooth, and they are hard to clean, but I

think they made every effort to keep them clean. Some of the toilet rooms were almost impossible to clean up.

Mr. FENTON. As I remember, it was an old stable there or something like it that had stalls in it that they were keeping these insane people in.

Mr. WHEELER. There was a wing of some kind there with a half dozen stalls in it, or whatever they might be, that certainly were a long way from a modern psychiatric ward here in the States.

Mr. FENTON. If that is what you mean, Mr. Chairman, yes; anything could happen there.

Mr. JENSEN. I was just wondering.

Mr. FENTON. That is why I asked the question as to whether those buildings were still in use.

Mr. MARX. I think they are going to tear down the majority of them.

Mr. JENSEN. I hope they tear them down because, certainly, they are terrible, filthy-looking buildings.

Mr. WHEELER. Our resident man tells me that some of the old buildings are to be destroyed.

Mr. FENTON. Are they still occupied?

Mr. WHEELER. None of the new buildings have been occupied yet. They will all probably be occupied in the next 60 days.

LOCATION OF NEW HOSPITALS

Mr. FENTON. There is a new Government 60-bed hospital?

Mr. WHEELER. At Christiansted.

Mr. FENTON. What is there at St. Thomas?

Mr. WHEELER. A 116-bed hospital.

Mr. FENTON. That ought to take care of it.

Mr. WHEELER. Their medical people think so. Both the present medical director, Dr. Anduze, and the one just before him, Dr. Moorehead, both think that there is sufficient capacity at each one of the locations to take care of their foreseeable load.

Mr. FENTON. The Frederiksted Hospital is the one up on the hill?

Mr. MARX. No; that is Christiansted.

Mr. FENTON. What have you done there with the old buildings?

Mr. MARX. I imagine they would tear them down. They were as bad as the ones at St. Thomas.

Mr. FENTON. Is there a hospital under construction there?

Mr. WHEELER. That 60-bed one.

Mr. FENTON. Where is the location of that?

Mr. MOONEY. It is around about 4,500 feet away from the center of Christiansted.

Mr. WHEELER. Where in relation to the old hospitzl?

Mr. MOONEY. In relation to the old hospital about 3,800 feet away.

Mr. FENTON. Downtown?

Mr. MOONEY. Yes; the old hospital is just at the outskirts of the town up on the hill.

Mr. FENTON. I remember the surgeon lived right outside there.

Mr. MOONEY. Yes, sir.

(Discussion off the record.)

Mr. FENTON. Then you had a little hospital at Frederiksted?

Mr. WHEELER. There was quite a good-sized one there.

Mr. FENTON. That was a sort of home, was it not?

Mr. WHEELER. Yes. That is where we have substituted a 12-bed health facility with the idea that most of the patients who require prolonged care will go to Christiansted.

Mr. FENTON. They are only a few miles apart.

Mr. WHEELER. That is right.

Mr. FENTON. Why could they not have built a hospital between the two places?

Mr. MARX. Because there is no water and no sewerage available.

Mr. WHEELER. It was a matter of supplying utilities and the cost of supplying them. This way it results in less overall cost; and, while there was some sentiment for a hospital between the two, everybody now, I think, is satisfied that because of the additional cost and the problem of finding water this is a better plan.

HOSPITAL STAFFS

Mr. FENTON. How do you staff those two hospitals?

Mr. WHEELER. How are they staffed?

Mr. FENTON. Yes. Do you have the same doctors in the two hospitals?

Mr. WHEELER. Here is a list of the medical staff. Let me see if I can learn from that, Dr. Fenton.

(The list referred to is as follows:)

THE MEDICAL STAFF

INSULAR

Dr. Roy A. Anduze, commissioner of health
Dr. Arkadius Tamm, obstetrician
Dr. Enrique Salgado, pediatrician
Dr. Zoltan Zpessey, ophthalmologist

ST. THOMAS AND ST. JOHN

Dr. Roy A. Anduze, chief municipal physician (surgeon)
Dr. Eric L. O'Neal, assistant chief municipal physician (lung surgeon)
Dr. Nikolas Kilk, municipal physician (general)
Dr. Lee Cole, municipal physician (internist)
Dr. Sylvester McDonald, municipal physician (general)
Dr. Bernard Rumsch, municipal physician (general)

ST. CROIX

Dr. Melvin Evans, chief municipal physician (internist)
Dr. Ullrich Karell, municipal physician (surgeon)
Dr. Reginald Moore, municipal physician (general)
Dr. Randall James, municipal physician (general)
Dr. F. Eller, municipal physician in charge at Frederiksted
Dr. Elena Stevenson, municipal physician, Frederiksted
(1) St. John is served by semiweekly visits of doctors from St. Thomas.
(2) There are 3 consultants from Puerto Rico on a weekly 1-day trip basis: (*a*) Orthopedic, (*b*) psychiatry, (*c*) otology.

NURSES

Miss Ianthe Blyden, chief nurse, St. Thomas
Miss Arabelle Tutein, chief nurse, Christiansted, St. Croix
Miss Ingeborg Nesbitt, chief nurse, Frederiksted

Mr. FENTON. These two hospitals are under construction anyhow?

Mr. MARX. They do not consider the one at Frederiksted a hospital. They say it is just a health center with 12 beds in it where they can put somebody up temporarily.

Mr. WHEELER. The medical staff, apparently, will be centered at Christiansted, and the facility at Frederiksted will be in charge of a nurse, according to that setup I have just handed you which I got from the Governor.

Mr. FENTON. Well, I am glad they are doing something to meet the need, anyhow, but I think the communities are so close together that to have two staffs is a little out of order. However, you say there are difficulties in getting utilities there?

Mr. WHEELER. Sewage disposal and water would have been the problems to meet.

Mr. FENTON. Of course, even when we were down there that one at Frederiksted was just sort of a home.

Mr. MARX. Yes, a lying-in place.

Mr. FENTON. As I understood it, it was an old persons' home.

Mr. MARX. I think it was; yes.

LEGISLATIVE AUTHORIZATIONS

Mr. NORRELL. Through 1953 I believe that we had appropriated a total of $10,203,000 for this item.

Mr. WHEELER. That is correct.

Mr. NORRELL. You say, in your explanation on page 155 of the justifications:

> Congress, in the Interior Department Appropriation Act, 1952, lifted the cost limitations as fixed in the authorizing act on the projects still to be completed.

Those projects are schools and hospitals. Was there any authorizing act to provide for these appropriations other than in the Interior Department appropriations bill?

Mr. WHEELER. There was not, Mr. Norrell.

The original act, which was Public Law 510, passed in 1944, set out with priorities established in the act, a list of the projects to be built in St. Thomas and St. John and in St. Croix and listed the estimated cost beside each one, and they totaled up to $10,028,200.

The act itself provided that there might be shifts of not to exceed 25 percent from project to project because it was recognized that it was not possible to estimate that closely, and there was some remark at one time when these projects were built that were built, as to why some others were not built, but the priorities for their building were set up in the act itself.

Last year we came up with our estimate which exceeded the amount of $10,028,000, as set in the authorizing act, by $175,000, making the total appropriated, $10,203,000, and the appropriation act itself said the 1953 money could be used for schools and hospitals notwithstanding the limitations in the act named. We are in that same position this year, Mr. Norrell.

Mr. NORRELL. However, as far as Congress is concerned that might be termed binding only on the money appropriated from year to year. You cannot take the position that we have authorized money to be expended in the future other than to complete projects that had been started with appropriated money.

Mr. WHEELER. I would say in answer to your question, Mr. Norrell, that if this $1,100,000 is appropriated, we have made plans, detailed plans, for schools beyond that amount because the committee said that they wanted these schools and hospitals planned to meet the needs in the islands.

We have planned a complete program of schools, so that we have expended some money for plans, which, if the Congress does not appropriate beyond, say, this $1 million, we would have some plans in which we had invested some funds.

Mr. NORRELL. I do not understand that that would give the officials the authority to just schedule any project for either a school or hospital in any of the three islands if they thought it was needed.

Mr. WHEELER. Well, we will not go beyond the preparation of these plans, and in that respect we are done except as the Congress appropriates from year to year, and we will not go any further. For example, this $1 million will buy the construction of this elementary school on St. Croix and the renovation of these schools on St. Thomas and St. John.

We will make no commitment beyond this, or beyond this $1 million until we shall have been back to the Appropriations Committee for additional funds.

Mr. NORRELL. I do not think that you should, and then I do not think you should consider that we have committed this Government, as you do on page 155 of the justifications, for future money, not to the extent beyond which it has been authorized by Congress.

Mr. WHEELER. We are cognizant of that. We were asked to plan for the need, Mr. Norrell.

Mr. NORRELL. What we said in the Appropriation Act Report for 1952, and I have the act here, under the heading "Virgin Islands Public Works", is this:

> With the appropriation recommended, and unused obligational authority in the amount of $1,467,000—

with these two items now—

> an amount sufficient to provide adequate schools and hospitals should be available.

That is as far as we went, Mr. Wheeler.

Mr. WHEELER. That is right, and that estimate stating the needs for that amount of money proved entirely too low. The amount of money, for example, will provide just these two high schools which we have just contracted to build. We have not committed Congress or ourselves beyond those two high schools. That is all the money we had, and that is all we awarded, but we recognize the need in the islands for additional schools, and we will come back with an estimate for what we intend to build in each successive year with no commitment that we cannot just drop right there if it is not appropriated.

Mr. NORRELL. This committee said that these two items, according to our investigation and the testimony before us, should be an amount sufficient to provide adequate schools and hospitals.

Mr. WHEELER. Well, I do not know what information the committee had in order to arrive at that conclusion. We never entertained that belief from information that we had available, and we always believed that the program for schools would cost $5 million.

The first schools that we bid on came in at 40 percent above the estimate that we had for those schools.

Mr. NORRELL. Now, will you take this law and read the last three lines where I have it marked there? Will you read that and tell me how you construe that language?

Mr. WHEELER. I construe this to mean that, in the opinion of the committee, the $1 million that they were then appropriating in cash, plus the $1,467,000 in unused contract authority previously granted would be sufficient to take care of building the schools and hospitals in the islands. That was a conclusion that did not stand up in practice, Mr. Norrell.

Mr. NORRELL. I agree with that interpretation you have given. I do not believe that this committee meant for you to go throughout the islands everywhere and construct hospitals or schools if you thought they needed them in those localities. I do not believe we intended that you should do that.

Mr. WHEELER. Well, I was certain that the committee meant that we would need to confine construction entirely to schools and hospitals. This passage in this report was the expression of two things, first that the money we had and the authority we had were to be confined to schools and hospitals. That is one thing and, secondly, it believed that this money would be sufficient to do the needed job, but it has proved not to be sufficient for that purpose.

Mr. NORRELL. But you do take the position that there is not even an implied authorization to go beyond the two items mentioned in the appropriation bill of last year which you just read?

Mr. WHEELER. Well, I think that there is certainly no authorization to make any commitments, but it seems to me that there is implied authority to determine the actual needs and to report to this committee, by way of estimates, what those needs are, and what it would cost, in our opinion, to meet them.

Mr. NORRELL. That is the conclusion I was trying to get to. You have another way, but we reach the same point, that there is no authorization beyond the use of those two funds set out there in the bill. Of course, we can go beyond that if we want to, and if there is no point of order made against it on the floor of the House.

Mr. WHEELER. That is right, Mr. Norrell. That is why we are here with this scheme that is beyond those figures.

Mr. NORRELL. If I read the record correctly the hospital program with the funds available now will be finished.

Mr. WHEELER. The hospital program is complete, and we will need no more money for it.

Mr. NORRELL. And the islands will operate the hospitals?

Mr. WHEELER. That is right, sir.

Mr. NORRELL. We just discussed the school program, and I am going to leave it where it is. You will not start any schools that appropriated money will not substantially complete?

Mr. WHEELER. No. We have just let contracts for these two high schools. There is not enough money in our available funds to equip them, but if the committee and the Congress see fit not to appropriate any further money then, I assume, they would have to use the equipment they now have in the old buildings to equip these buildings, but the projects will be complete and usable units.

Mr. JENSEN. Gentlemen, that completes the hearings on the Virgin Islands. Unless someone has something they wish to bring before the committee the hearings are concluded on the Virgin Islands.

THURSDAY, MARCH 12, 1953.

VIRGIN ISLANDS CORPORATION

WITNESSES

GORDON SKEOCH, PRESIDENT, VIRGIN ISLANDS CORPORATION
JAMES P. DAVIS, DIRECTOR, OFFICE OF TERRITORIES
D. H. NUCKER, EXECUTIVE OFFICER, OFFICE OF TERRITORIES
MASON BARR, CHIEF CARIBBEAN DIVISION, OFFICE OF TERRITORIES

REVOLVING FUND

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$2,595,000	$1,515,000	$1,375,000
Prior year balance available		301,843	
Total available for obligations	2,595,000	1,816,843	1,375,000
Balance available in subsequent year	−301,843		
Obligations incurred	2,293,157	1,816,843	1,375,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year		$693,157	
Obligations incurred during the year	$2,293,157	1,816,843	$1,375,000
	2,293,157	2,510,000	1,375,000
Deduct unliquidated obligations, end of year	693,157		
Total expenditures (invested in Corporation)	1,600,000	2,510,000	1,375,000
Expenditures are distributed as follows:			
Out of current authorizations	1,600,000	1,515,000	1,375,000
Out of prior authorizations		995,000	

GRANTS

Amounts available for obligation

Appropriation or estimate (obligations incurred):

1952	$130,000
1953	241,000
1954	1,170,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Obligations incurred during the year	$130,000	$241,000	$1,170,000
Deduct adjustment in obligations of prior years	33,231		
Total expenditures (invested in Corporation)	96,769	241,000	1,170,000
Expenditures are distributed as follows:			
Out of current authorizations	96,769	241,000	1,170,000
Out of prior authorizations			

Mr. JENSEN. Mr. Gordon Skeoch, President of the Virgin Islands Corporation, will testify before the committee now to explain to us, the justifications for his request for funds for 1954 for the Virgin Islands Corporation. Do you have a statement you wish to make, Mr. Skeoch?

Mr. SKEOCH. No, sir; Mr. Chairman, I have no prepared statement. My statement, in effect, is contained in the presentation of this budget here for the Corporation.

REVOLVING FUND

ORIGIN AND PURPOSE OF CORPORATION

Mr. JENSEN. Will you explain the revolving fund? For the fiscal year 1953 you had $1,515,000, and you are asking for a decrease of $140,000 from that figure for 1954.

Mr. SKEOCH. Well, this Corporation, sir, was chartered under Public Law 149 by Congress in June 1949. It took over the Virgin Islands Company, which was a Federal instrumentality that had started in 1934.

Its main purpose was the economic rehabilitation and development of the Virgin Islands.

Under Public Law 149 we were authorized to get up to $9 million, but the moneys from that would come annually as presented and approved in the budget estimate.

TWO PRINCIPAL BUDGET ITEMS

For the year 1953 we got $1,515,000. For this year we are asking $1,375,000, which covers 2 main items, our general operations, which are mainly sugar and our power activities in the islands of St. Croix and St. Thomas.

Now, insofar as $325,000 of that amount is concerned, that is principally for the development and continuation of our sugar industry. For power $1,050,000 is asked for.

POWER FACILITIES

On the power phase of it we have been operating a powerplant in St. Croix through the REA in the beginning. The REA was paid out, and the Corporation now owns that activity. At the same time they acquired municipal plants which were unable to operate further. They were d. c. plants. The municipality did not have the money to convert them, and it was inefficient having two operations, so it asked the Virgin Islands Corporation to take them over. Congress approved the appropriation, so today we are now operating one plant on the island of St. Croix.

The same thing was true on St. Thomas. That was a municipally operated plant there, but they did not own the generating plant. The plant was and is owned by the Navy Department. The municipality had distribution lines. The municipality tried to finance themselves by loans from banks, the RFC, from private sources, or from their own resources, but could not do it.

They were at the point on St. Thomas where they were going to just collapse for lack of equipment. So, Congress gave us an appropria-

tion to acquire the distribution system, and also funds to put in much-needed generating equipment. That was the initiation of the project.

We are in the process right now of rehabilitating those lines, and we need even more additional generating equipment. The island of St. Thomas is very badly off. We have not sufficient capacity to service the consumers when we want to take any new consumers.

Mr. JENSEN. How much are you asking for that purpose?

Mr. SKEOCH. We are asking for the island of St. Thomas, $650,000; for the island of St. Croix, $400,000; and for our general operations there—meaning sugar—$325,000.

THE SUGAR INDUSTRY

Mr. JENSEN. All right, referring to your "General operations, $325,000," how will you expend that money?

Mr. SKEOCH. That will be expended mainly, sir, for agricultural equipment, repairs to our workers' houses, and a small amount for sugar-mill equipment.

Mr. JENSEN. Is not the sugar mill in pretty good repair?

Mr. SKEOCH. It is in reasonable repair. Our biggest trouble in the sugar industry, as I am sure you are aware, is the fact of our low quota.

Last year we had a quota of 6,000 tons. We made 11,500 tons. By having to sell the difference in the world market, we lost $220,000, just on that one thing.

Mr. JENSEN. What are you getting for raw sugar?

Mr. SKEOCH. Under quota at the present time in the United States, about $120 a ton. It fluctuates, but it is about $120.

Mr. JENSEN. $120 a ton?

Mr. SKEOCH. Yes; $120 a ton in the United States market.

Mr. JENSEN. That is just $6 a hundred.

Mr. SKEOCH. Yes, sir.

Mr. JENSEN. And you deliver?

Mr. SKEOCH. Yes.

Mr. JENSEN. Where?

Mr. SKEOCH. C. a. f. New York, but the world market price is running about $70 a ton; so that our excess sugars we have to sell on that market with a loss in the differential of price of $50 a ton.

Mr. JENSEN. Yes.

Mr. SKEOCH. This year, for example, our quota has been raised to 12,000 tons, but we will produce somewhat over 16,000 tons. That will mean we will have to sell some 4,000 plus again in the world market and take a terrific loss.

Mr. JENSEN. Yes.

Mr. SKEOCH. To have any efficient operation at all in sugar, we should have a minimum quota of between 20,000 and 25,000 tons. That is in relation to an existing quota in this country of 7,800,000 tons. All we get out of that is 12,000 tons out of 7,800,000.

USE OF BAGASSE

Mr. JENSEN. What do you do with your bagasse?

Mr. SKEOCK. We use that for fuel.

Mr. JENSEN. All of it?

Mr. SKEOCH. Reasonably all of it. The rest we put in the fields.

Mr. JENSEN. Is that the best use you could make of it, or would it be possible to fuel that plant with some other kind of fuel and then use the bagasse for a pulp plant or for feed?

Mr. SKEOCH. In our particular circumstances it would not, sir, because all of our fuel has to be brought into the island, on which we pay a high freight. Our bunker C oil costs us about 10 cents a gallon landed in there. Conversely, if we should use all of the bagasse as pulp, we would not be able to process it because of the shortage of water. It takes a terrific amount of water to run a pulp plant.

INCREASED PRODUCTION

Mr. JENSEN. Do you use any commercial fertilizer?

Mr. SKEOCH. Yes, sir; we do.

Mr. JENSEN. Where do you get it?

Mr. SKEOCH. They have a plant over in Puerto Rico that produces fertilizer.

Mr. JENSEN. Do you buy it quite reasonably?

Mr. SKEOCH. Yes; it costs around $60 a ton.

Mr. JENSEN. What are the ingredients?

Mr. SKEOCH. 12–6–8. It is mainly ammonium sulfate, and there is some potash in it.

Mr. JENSEN. Ammonium sulfate and potash?

Mr. SKEOCH. Yes, sir.

Mr. JENSEN. That is what your land needs?

Mr. SKEOCH. Yes, sir; that is actually what it needs.

We have had very good results. We have been using that for the last 3 years. We have had a nice increase in our tonnage break. We have brought our average up from about 12 tons an acre to 28¾ tons of sugarcane per acre.

Mr. JENSEN. What is the gentleman's name who came there a few years ago and was responsible for this added production?

Mr. SKEOCH. Mr. Colon.

Mr. DAVIS. Norman Olson was president of the company, and Mr. Colon, his field superintendent, improved the agricultural methods.

Mr. JENSEN. Is he still there?

Mr. SKEOCH. No, sir; he is not. He left last year.

Mr. JENSEN. But you are carrying on his system?

Mr. SKEOCH. That is right; that is the recognized system.

LOANS

Mr. JENSEN. Without objection, we will put the table at the top of page 2 of the justifications in the record at this point.

(The matter referred to is as follows:)

Loans

Subactivity	Appropriation	Decrease	Base 1954	Estimate 1954	Increase
(*a*) Capital investment	$565,000	$565,000	.....	$325,000	$325,000
(*b*) Agricultural diversification and marketing	75,000	75,000	.....	.....	.....
(*c*) Industrial and commercial development	75,000	75,000	.....	.....	.....
(*d*) Power division	800,000	800,000	.....	1,050,000	1,050,000
Total	1,515,000	1,515,000	.....	1,375,000	1,375,000

HOUSING FACILITIES

Mr. JENSEN. You are asking for $100,000 to build homes for employees. How will the cost of these houses be covered, and over what period of time? How much is the rent?

Mr. SKEOCH. In the case of our additional houses built for workers——

Mr. JENSEN. What sort of houses are they?

Mr. SKEOCH. Well, they are all little two-room houses; houses measuring 12 by 18. Those houses cost us about $1,000 to $1,200 to build. The house is given to the field worker free of any charge. It is a portion of their wages, it is common practice, traditional practice throughout the sugar industry that your field workers are supplied with housing. Now, some of our supervisory personnel live in houses that we own. They are charged rent for them, a nominal rent. The rents vary from $15 to $30 a month.

ANNUAL INCOME OF SUGARCANE WORKERS

Mr. JENSEN. What is the annual income of workers in the sugarcane fields? I presume off season they work at other things.

Mr. SKEOCH. Yes; off season they do a certain amount of cultivation work for the coming crop. I would say that the average for a field worker would be about $800 a year.

Mr. JENSEN. That is not too bad an income for the Virgin Islands, is it? How are food prices there?

Mr. SKEOCH. Food prices are higher than in this country, because the main part of them are imported.

Mr. JENSEN. That is considerably more than the income of the worker, say, 10 years ago.

Mr. SKEOCH. Oh, yes, considerably more.

Mr. JENSEN. It is three times as high.

Mr. SKEOCH. Let me put it this way. In 1934 the average field wage was 55 cents for a day of 8 hours.

Mr. JENSEN. Yes.

Mr. SKEOCH. At this time the minimum is $3.20 a day.

PUERTO RICAN EMPLOYEES

Mr. JENSEN. Do you still employ a number of Puerto Ricans to work in the cane fields?

Mr. SKEOCH. Yes, we do.

Because, you see, sugar cultivation is paradoxical in this sense, that a man can grow more sugarcane than he can harvest during the harvest season, so that in order to keep our resident labor force employed throughout the year we have to get help during the harvest season to take the crop off, and that is when we employ additional labor.

(Discussion off the record.)

SMALL SCALE GARDENING

Mr. JENSEN. Do you give a garden plot to these workers that live in these Virgin Island homes and pay no rent?

Mr. SKEOCH. They have a small plot, yes.

Mr. JENSEN. Is there anybody there to show them how to do a better job of raising vegetables?

Mr. SKEOCH. Just recently, last July, the experimental station in the Department of Agriculture started in down there, and that is one of the main points in their program, and that is being done.

Mr. DAVIS. I might add, Mr. Chairman, that prior to that for a number of years there has been an extension service of a sort carried out by the Territorial government from funds made available in our appropriation. They have had an extension agent and a home economics woman, and they have done what they could in the extension field in teaching people how to raise their own vegetables and how to otherwise improve their home conditions.

Mr. JENSEN. I see.

Mr. DAVIS. That work has now all been turned over to the Department of Agriculture under the new plan we succeeded in getting set up last year.

Mr. JENSEN. Of course, coming from a farm community, and having been born and raised on a farm, I noticed that there was a great lack of gardening when I was there a year ago last Eastertime.

Mr. SKEOCH. At that time, Mr. Chairman, the gardens were not there because that is our dry season.

Mr. JENSEN. The garden plots were not there. If they had had garden plots I would have seen them. Some of them had wonderful gardens, but I do not think enough emphasis has been put on helping those people to raise garden truck. It means a lot to a family.

You know, the old root cellar and the old smokehouse, in bygone days, was the family's social security. Now, it is the best social security in the world. There is no reason at all why the people of the Virgin Islands cannot have a root cellar for their potatoes, their carrots, and truck that they can keep. Maybe they cannot have a smokehouse. There are a lot of people yet who have smokehouses and who smoke their meat in order to keep it.

I could see where there was a great need down there for someone to really show those folks how to garden and how to get along like our old pioneers who made this country of ours. I hope that more emphasis will be put on that activity.

POWER DIVISION

On page 4 of the justifications I note that you are asking for $1,050,000 for power facilities on St. Croix and St. Thomas. What revenue is the Virgin Islands Corporation getting from the sale of power?

Mr. SKEOCH. That power operation is on a self-liquidating basis.

In the island of St. Croix we serve 2,487 consumers; in the island of St. Thomas we serve 3,122 consumers, and on St. Croix as of the month of December 1952, we produced 245,827 kilowatts, and on St. Thomas 625,000 kilowatts.

Mr. JENSEN. What is the rate per kilowatt-hour?

Mr. SKEOCH. The rate is scaled from 10 cents a kilowatt down to 3.

Mr. JENSEN. That is pretty high priced power.

Mr. SKEOCH. It is, but we have to haul all of our fuel in there.

Mr. JENSEN. I realize that.

Mr. SKEOCH. However, those plants are operating at a profit, liquidating themselves.

The St. Croix plant is making about an average of $2,000, carrying depreciation interest and everything.

The St. Thomas plant is doing even better, but they have a little higher rate which we hope to be able to and can bring down.

We only acquired the St. Thomas plant in December. However, the crying need there is for increased capacity. We have about 400 consumers that have been waiting some time for service in St. Croix, and about the same in St. Thomas. We cannot connect them on because we do not have the generating or distribution capacity to serve them.

THE SUGAR QUOTA

Mr. JENSEN. Including the 1954 request for funds for your Corporation, the total which will have been appropriated, should we appropriate the full amount for 1954, will be $6,737,000 for this revolving fund. Now, we authorized $9 million?

Mr. SKEOCH. That is right.

Mr. JENSEN. Is that $9 million going to put the Virgin Islands Corporation on a profitmaking basis, so that there will be no need for further appropriations from your revolving fund?

Mr. SKEOCH. I believe the answer to that is "Yes," Mr. Chairman, provided we get assistance with our sugar quota.

Mr. JENSEN. Have you made application for a greater sugar quota?

Mr. SKEOCH. Yes, that has been strenuously urged for the last several years. This year they raised our quota from 6,000 to 12,000, but it is still too small to make an efficient operation.

Mr. JENSEN. What have you asked for, what quota?

Mr. SKEOCH. We have been asking for 20,000 tons.

You see, you cannot run a sugar operation, as I am sure you know, if it is too small.

Last year, as a result of having this increased capacity of production, we lowered our cost about $15 a ton in the manufacture of sugar, and we can predict progress on that line if we can sell our sugar in the United States market, but having to pay minimum wages as set by PMA, and having to deal in goods of United States production, and our standards of living being geared to United States methods, we cannot afford to sell our sugar that we produce on the world market and compete with areas like Cuba and places of that sort.

COST OF PRODUCTION AND INCOME FROM SUGAR

Mr. JENSEN. Do you know the actual cost per ton of the sugar which you produced in the last season? What is your actual cost of production? Do you care to state that for the record or off the record?

Mr. SKEOCH. I would like to discuss that off the record first, because it has several different answers.

Mr. JENSEN. I can understand that.

(Discussion off the record.)

Mr. JENSEN. What was the actual production cost of a ton of sugar in your last marketing and production season?

Mr. SKEOCH. Total cost of sugar, manufactured, $121.18.

Mr. JENSEN. $121.18 per ton?

Mr. SKEOCH. Yes, sir.

Mr. JENSEN. Are your administrative costs added in that?

Mr. SKEOCH. Yes, sir, and we have shipping charges.

Mr. JENSEN. Then, your shipping charges are not included?

Mr. SKEOCH. No, sir.

Mr. JENSEN. What do they amount to?

Mr. SKEOCH. $12.91 a ton, bringing the total cost to get it to market of $134.09.

Mr. JENSEN. And you receive how much a ton for the quota of sugar?

Mr. SKEOCH. It varies. Approximately $120 a ton, but I can give you the actual net figure.

Mr. JENSEN. Please do.

Mr. SKEOCH. It was $117.35 a ton for quota sugar last season.

Mr. JENSEN. Are you reading that figure from a prepared sheet?

Mr. SKEOCH. Yes, sir.

Mr. JENSEN. Does it have all those figures that you are quoting?

Mr. SKEOCH. Yes, sir.

Mr. JENSEN. I would like to have that made a part of the record, without objection.

Mr. SKEOCH. All right, sir.

(The matter referred to follows:)

Statistics on sugarcane and sugar, fiscal year 1952

	Total	Per ton
Administration cane:		
Acres harvested	3,196.300	
Tons harvested	91,930.480	
Tons per acre	28.760	
Growing cost of administration cane	$457,552.34	$4.98
Harvesting cost of administration cane	311,570.88	3.39
Total cost of administration cane harvested	769,123.22	8.37
Purchased cane:		
Acres harvested	1,738.10	
Tons per acre	19.32	
Tons purchased	33,585.75	
Cost of purchased cane	$218,509.28	6.51
Raw sugar production:		
Tons of cane ground for sugar	125,515.655	
Sugar yield 96° basis (percent)	9.279	
Tons of sugar, physical weight	11,547.50	
INCOME FROM SUGAR		
Sugar	$1,191,452.76	$103.18
Molasses	69,524.37	6.02
PMA benefit payment (administration cane)	94,070.14	8.15
Total	1,355,047.27	117.35
EXPENSES FROM SUGAR		
Total cost of cane processed	987,632.50	85.53
Manufacturing cost	411,726.39	35.65
Total cost of sugar manufactured	1,399,358.89	121.18
Selling and shipping expenses:		
Sugar	143,967.02	12.47*
Molasses	5,094.80	.44
Total	1,548,420.71	134.09
Gross operating profit (or loss (−))	−193,373.44	−16.74

NOTE.—$11.24 per ton ocean freight was not incurred on 5,547,500 tons of sugar sold in the world market f. o. b. St. Croix. Had this expense been paid the selling and shipping expenses would have been $17.87 per ton.

LOSS ON SUGAR PRODUCTION

Mr. JENSEN. Your cost per ton for producing sugar and marketing sugar was $134 a ton?

Mr. SKEOCH. Yes, sir; and our income was $117.35.

Mr. JENSEN. So, you lost $16.74?

Mr. SKEOCH. Yes, sir.

Mr. JENSEN. You lost that amount on every ton of sugar you produced?

Mr. SKEOCH. That is right, sir.

Mr. JENSEN. According to those figures, you are not doing too good?

Mr. SKEOCH. That is right.

Mr. JENSEN. That is, under the present sugar quota?

Mr. SKEOCH. That is correct.

Mr. JENSEN. What is the quota you are asking for?

Mr. SKEOCH. A minimum of 20,000 tons.

Mr. JENSEN. If you have a minimum of 20,000 tons of sugar quota, could you then make a profit under present costs of production, and I presume you propose to hold the production costs to the present amount?

Mr. SKEOCH. Mr. Chairman, if I may answer your question this way: Given normal conditions and with that sugar quota, I believe we should, at least, break even. You see, we have a condition there where our administrative costs and things like that will not go up. Those costs are constant and our cost per ton would go down and we would come nearer matching our income figure.

OTHER FARM PRODUCTION

Mr. JENSEN. What other farm products does the Virgin Islands Corporation produce?

Mr. SKEOCH. Well, of course, we have a byproduct of molasses from the sugar, but that is included in those figures for sugar.

Mr. JENSEN. I presumed it was.

Mr. SKEOCH. Then, we are doing some experimentation work in vegetables; tomatoes, cabbage, pepper, and egg plants. Our problem in that is mainly one of transportation to the mainland and to get refrigerated boats often enough.

GRANTS

WATER AND SOIL CONSERVATION

Mr. JENSEN. Another problem is to get enough water. Is that not also a great problem?

Mr. SKEOCH. That is a great problem; yes, sir.

Mr. JENSEN. How are you coming along on your water conservation? What is your soil and moisture program, which involves the ponds and the building of dams from which you take water for irrigation? How is that program coming along?

Mr. SKEOCH. Since we started that program, we have built 23 earth dams that have a capacity of 116 million gallons. We now have in all on the Island of St. Croix 43 dams, with an impounding capacity of 165 million gallons. We are, at present, working on 36 more of those dams, which will have an estimated capacity of another 165 million gallons. So, before the end of this year, we should have about a 350-million gallon impounding capacity.

Mr. JENSEN. And how many dams will you have in all?

Mr. SKEOCH. A total of 79 dams.

Mr. JENSEN. What is the average cost for construction of those dams? Can you give that?

Mr. SKEOCH. They vary very much, sir, depending on the topography and the layout of the whole thing.

Mr. JENSEN. I asked for an average cost. What I am trying to get at is this: I have felt, as this committee has felt for many years, that your production of most every kind of farm crops on the Virgin Islands is dependent on catching water and impounding water for use on the land for irrigation. If we can, by impounding water, furnish enough water for a much-expanded agricultural and gardening program on the Virgin Islands, in the course of a few years, the Virgin Islands will be self-supporting and their standard of living will rise.

That is why this committee has been rather liberal in appropriating money for these water reservoirs.

Do you feel that the money which has been spent for the impounding of this rainwater has been money well spent?

Mr. SKEOCH. Most definitely, sir.

Mr. JENSEN. What do you recommend in this budget for dam building?

Mr. SKEOCH. We are recommending for that program $100,000.

Mr. JENSEN. And how many reservoirs do you anticipate that amount of money will build, in addition to what you already have?

Mr. SKEOCH. That will build about fifty more.

Mr. JENSEN. Your average cost is about $2,000 a dam?

Mr. SKEOCH. Yes, sir.

Mr. JENSEN. Those dams are essentially nothing but dirt fills and you have equipment of your own, bulldozers, tractors, carryalls, etc.?

Mr. SKEOCH. That is right.

Mr. JENSEN. Do you hire any of the work?

Mr. SKEOCH. No, sir; we do all the work with our own equipment.

Mr. JENSEN. Do you hire natives?

Mr. SKEOCH. Yes, sir; to operate the equipment.

I think I should mention, Mr. Chairman, that another very important thing that that dam-building program is doing, is raising the water table of the islands.

Mr. JENSEN. Naturally.

Mr. SKEOCH. For the 25 years prior to the last 2 years, the water table of the islands had gone down 30 feet, and these dams are already starting to bring that up. Now, of course, it will take several years for them to show their full value.

Mr. JENSEN. And the closer the underground water gets to the roots of your crops, the greater production you will have, and irrigation

will not be as important. You will have the moisture in the ground to feed the crops, without irrigating in some places?

Mr. SKEOCH. In some places; yes, sir.

Mr. JENSEN. I am glad to know that, and I hope you will put great emphasis on that program, because without good land and productive land, the people will suffer.

OPERATIONS LOSSES

I notice you are asking for $929,000 additional for 1954, over and above 1953, for grants. Just what does that entail?

Mr. SKEOCH. That entails—the major portion of that is to cover losses that were incurred in the year.

Mr. JENSEN. Losses in what?

Mr. SKEOCH. Losses in our general operations.

Mr. JENSEN. So, actually, that amount of money represents what what you estimate will be the operating loss of the Virgin Islands Corporation for fiscal 1954; is that right?

Mr. SKEOCH. No, sir. Only $400,000 of that amount is estimated for 1954.

Mr. JENSEN. $587,925 has already been lost; is that right?

Mr. SKEOCH. Yes, sir; in the year 1952.

Mr. JENSEN. But should you get this sugar quota of 20,000 tons which you have asked for, then we could expect that $400,000 loss might be wiped out for 1954, or to some degree, at least?

Mr. SKEOCH. Yes, sir; it would be much reduced.

Mr. JENSEN. Will you explain the three nonrevenue items on page 8, for which you are asking $182,075?

Mr. SKEOCH. $100,000 of that is the program which we have just discussed for the water and soil conservation.

TOURIST DEVELOPMENT PROGRAM

The $32,075 is requested for our tourist development program. The tourist industry has become quite a factor in the economy of the islands and there is a Virgin Islands Tourist Development Board down there which gets funds from the municipal governments in St. Croix, St. Thomas, and St. Johns. In addition to that, under our program, we help them with funds to do general advertising, the distribution of brochures, folders and handbooks, travel expenses for the agents, maps, local educational programs, and what have you. In the overall that promotes the activity of tourism by advertising the islands and getting people in there to stay and spend their winters, and we are getting considerable summer trade also at this time.

Mr. JENSEN. Is that properly a responsibility of the Virgin Islands Corporation? How can you justify the spending of Virgin Islands Corporation funds for this purpose?

Mr. SKEOCH. Under our charter, sir, of Public Law 149 that set up the Virgin Islands Corporation, we were authorized and instructed to go into that as an important factor in the development of the economy of the islands. The tourist business today in the Virgin

Islands is bringing in several million dollars a year, and to promote and develop that is what that figure is for.

Mr. JENSEN. There must be a lot of people down there who are profiting by this great influx of tourists, and profiting personally.

I cannot quite understand why the taxpayers of America should be expending $32,075 to enhance the profits of private industry down there. I cannot quite understand how we can square that with good business principles.

Mr. DAVIS. Mr. Chairman, if I may interrupt briefly there, when the old Virgin Islands Company was about to expire back in 1948 and 1949, under the operation of the Government Corporations Act, you will recall that we had quite extensive discussions in the legislative committee and also in this committee about what the Corporation should do.

I think it is true that the objective of the Congress in setting it up and giving it the authorization of $9 million, and the subsequent appropriations here, was clearly to stimulate in every way possible the economic development of the Virgin Islands, so that the need for help would become less and the people would become more and more self-supporting.

It was clearly understood at that time, and I think both the records and the act itself, show that the development of the tourist business was one of the major objectives that we saw as contributing to that development, and actually, the recent improvement of conditions in the Virgin Islands in the last few years is very largely due to that and that program has succeeded beyond even our best expectations. I think it is conservative to say that at least $4 to $5 million of revenues are now flowing into the islands by reason of the tourist business. There are accommodations for something like 1,000 to 1,200 transient rooms available in the islands, whereas at the time of the enactment of the act, there were not more than 100 in all the islands put together.

It was estimated by the results of a survey last year that on St. Thomas Island, 35 percent of the total labor force was engaged directly in, or in activities related to, the tourist industry. So, I think we can be very glad that the development of the tourist business has, at least, lessened the load of promoting the economy.

As to the question of the contributions by the Virgin Islands Corporation, acting under the authorization and the act, the Board has made a moderate contribution in the way of matching funds, other than contributions by the two municipalities, and those funds are raised by private subscription. In other words, the hotels, the stores, and other people have been asked to supply a portion of the matching funds, and the municipalities, by action of the municipal councils, have supplied the balance.

Mr. JENSEN. I am going to tell you exactly what I think about this. I think the time has now come when the business men that profit by the tourist trade should do the entire job of publicizing this wonderful vacation spot, which the Virgin Islands is, and do everything else that would attract people there. I am going to be perfectly frank with you, I think the job of the Virgin Islands Corporation is to run the Virgin Islands Corporation as a business and not as a summer resort

publicity agency. You have plenty to do in running this Virgin Islands Corporation in a business way and to finally make it pay out, rather than to spend any of your time or money, worrying about bringing people there. Let the other people do that.

LOAN FOR A PRINTING PRESS

Mr. JENSEN. How are your loan collections running? You have a loan of $5,700 on a printing press. Are they keeping up their payments according to the contract, or are they in default, and, if so, why?

Mr. SKEOCH. They had been in default, but as of now, sir, they have caught up and they are meeting their payments on schedule.

ACQUISITION OF LAND AND STRUCTURES

Mr. BUDGE. I note in the committee print, under the title "Power Program," subtitle "Acquisition of Assets," an item "Land and structures, $345,000." I do not find any breakdown of that in the justifications.

What is that, acquisition of land and structures?

Mr. SKEOCH. That undoubtedly refers to the acquisition of property in St. Thomas. We acquired that in December. That is not in this present budget here, sir. Is that what you mean?

Mr. BUDGE. That is a portion of your total here of $1,050,000 in the power division, but there is no material on it in your justifications. I am wondering what "land and structures" mean. Just what is that?

Mr. NUCKER. I should like to try to answer that one. This is in the statement of "sources and application of funds," as required by corporate presentation. The $50,000 is the amount we are asking this year for the power plant program and it is expected and estimated to be spent for items which will become a part of the land and structures; $700,000 of the million dollars is anticipated or estimated to be spent for equipment which will go in the power plant.

Mr. BUDGE. Tell me just what the item "Land and structures" is?

Mr. SKEOCH. Actually speaking, sir, it is under the caption of land and structures, but it should all be viewed as "structures." In other words, it is essentially the distribution lines, the poles, the transformers, and so forth.

Mr. BUDGE. You are not buying any land this year?

Mr. SKEOCH. No, sir; we are not buying any land, per se.

MINIMUM WAGE RATE

Mr. BUDGE. A few moments ago, as a portion of the explanation of why we lost $16.74 a ton on sugar, you stated you were required to pay a minimum wage under the regulations of the PMA, is that right?

Mr. SKEOCH. Yes, sir.

Mr. BUDGE. What is the minimum wage that you must pay?

Mr. SKEOCH. Forty cents an hour for 8 hours and all over 8 hours, time and a half.

Mr. BUDGE. Do you make any compensation for that in the housing facilities which you furnish?

Mr. SKEOCH. No; we do not. It has been common practice in the industry of the islands, and throughout the West Indies, that workers' houses are furnished free, because they are required to live at the site, or as close to the site of their work as possible.

Other private operators, whether they are growing sugarcane or cattle, furnish their workers with housing. It has been an accepted program.

Mr. BUDGE. How does your wage of 40 cents, plus housing, compare with other wages in the islands?

Mr. SKEOCH. They pay 40 cents an hour, also, sir; they are under the same act.

Mr. DAVIS. Mr. Budge, there is a municipal minimum-wage law which was passed by the municipal councils and which is applicable throughout the islands and applies to all, other than Government workers, and it is the same amount, 40 cents.

COMPARING PRODUCTION COSTS OF BEET SUGAR AND CANE SUGAR

Mr. BUDGE. How does your total cost, less shipping, of $121.18 per ton on sugar compare with the total cost of the beet-sugar industry in the continental United States?

Mr. SKEOCH. I am not familiar with the beet-sugar figure, sir.

Mr. BUDGE. Does anyone else know that?

Mr. BARR. I do not know it on the basis of cost, but I think the price of 6 cents that the beet sugar industry pays, they can make a profit out of it, which is not so in the Virgin Islands. I do not know about their cost of production.

Mr. BUDGE. Would you repeat that?

Mr. BARR. I say, with sugar at six cents, which is about what the Virgin Islands Corporation is getting for their raw sugar, that the beet farmers can make a profit on beet acreage, whereas in the Virgin Islands, they cannot at that price.

Mr. BUDGE. You are talking about the field production?

Mr. BARR. Yes, sir, the production of the raw sugar. That would be the production of the cane and the grinding of the cane into raw sugar.

Mr. BUDGE. That amounts to $121.18 per ton. In other words, we can produce the sugar cheaper in the United States than we can in the Virgin Islands?

Mr. BARR. Yes, sir.

Mr. SKEOCH. I also want to make the point right there, that if we could produce more, our cost per ton would go down, but to produce more and have to sell it at a huge differential in price in the world market, it would make our loss greater.

Mr. BUDGE. But a few moments ago you were saying with the increased quota of 20,000 tons, you felt you could at least break even?

Mr. SKEOCH. That is right, sir.

Mr. BUDGE. Well, according to these figures you could not.

Mr. SKEOCH. This $121 would go down if we got the 20,000-ton quota.

Mr. BUDGE. But would it go down below the domestic production costs?

Mr. SKEOCH. I cannot say that it would, because I do not know just what that figure is, but based on our operations, it would come to a point in a normal year that I believe we could break even.

Mr. DAVIS. I think a partial answer to the question, Mr. Budge, is the fact that the domestic sugar production, both in beets and sugarcane, has not tended to increase in recent years. It has decreased rather than increased until, perhaps, the last year, when there was a slight increase. The domestic production has not met your quota for several years now.

Mr. BUDGE. Of course, there is some reason for that.

INCOME AND EXPENSE FOR FISCAL YEARS 1935–52

Mr. NORRELL. If I remember correctly, the Virgin Islands Corporation was organized during the depression days by Mr. Ickes.

Mr. DAVIS. The original Virgin Islands Company, yes, sir.

Mr. NORRELL. There has been some reorganization since that time but the parent activity is now still in existence and I believe, under an act of Congress that you sponsored some years ago, the name was changed to the Virgin Islands Corporation?

Mr. DAVIS. Yes, sir.

Mr. NORRELL. How much money, all told, has gone out of the Federal Treasury, if you can give me this figure at this time, since its organization under any name and down through the last appropriation. I would like to get the total, as near as I can, of all funds which have gone into this Corporation out of the United States Treasury.

Mr. DAVIS. We will be very glad to supply it. The computation was made a few years ago, but it has not been brought down to date. We can readily supply it for the record.

Mr. NORRELL. All right. Include in that all the money that has gone from the Treasury to the concern that Mr. Ickes organized or any reorganization of that activity.

Mr. DAVIS. Yes, sir.

Mr. NORRELL. Then, I would like you to add to that statement, Mr. Davis, the money that you have earned through the activities of the original Company, or its successor Corporation, so that we can see at a glance the income and expenditures of the activities.

Mr. Davis. Yes, sir.

(The material referred to follows:)

Statement of capital furnished by the United States Government to the Virgin Islands Company and the Virgin Islands Corporation

Virgin Islands Company:	
National Industrial Recovery and Public Works Administration funds used to purchase and rehabilitate the properties operated by the Company under agreement with the Department of the Interior	$2,965,252
Grants from Federal relief funds	899,269
Loans from the Rural Electrification Administration	255,502
Deferred interest on loans from the Rural Electrification Administration (of which $17,883 is included in the amount of the notes)	21,923
Capital stock subscriptions	30
Loans from the U. S. Treasury	750,000
Total capital furnished Virgin Islands Company	4,891,976
Virgin Islands Corporation:	
Appropriations, fiscal years 1950 through 1953:	
Revolving fund	5,360,000
Grants	1,871,000
Total appropriations to Virgin Islands Corporation	7,231,000
Grand total	12,122,976

Virgin Islands Company and Virgin Islands Corporation—Income, expense, and gross profit or loss (fiscal years 1935–52)

Fiscal year ending June 30—	Income	Expense	Gross profit or loss (−)
1935	$2,923.20	$26,210.10	−$23,286.90
1936	53,619.77	64,990.41	−11,370.64
1937	221,689.40	216,529.55	5,159.85
1938	344,498.17	430,918.83	−86,420.66
1939	194,558.12	217,560.49	−23,002.37
1940	349,051.82	387,348.53	−38,296.71
1941	281,155.90	341,612.20	−60,456.30
1942	462,347.07	503,200.09	−40,853.02
1943	320,824.95	297,179.67	23,645.28
1944	1,299,810.75	674,146.82	625,663.93
1945	668,593.51	630,135.05	38,458.46
1946	660,571.00	691,948.00	−31,377.00
1947	770,035.66	855,416.67	−85,381.01
1948	426,936.81	647,048.36	−220,111.55
1949	662,499.70	1,082,711.33	−420,211.63
1950	1,737,380.00	2,010,993.00	−273,613.00
1951	1,164,977.00	1,564,138.00	−399,161.00
1952	1,499,421.00	2,095,233.00	−595,812.00
Total	11,120,893.83	12,737,320.10	−1,616,426.27
	Power Division (Formerly Rural Electric Division)		
1942	$15,447.58	$12,331.98	$3,115.60
1943	36,650.13	32,425.74	4,224.39
1944	39,557.69	36,867.28	2,690.41
1945	24,532.77	36,807.74	−12,274.97
1946	25,624.00	38,494.00	−12,870.00
1947	24,168.75	44,943.22	−20,774.47
1948	29,836.19	46,095.41	−16,259.22
1949	49,077.75	56,995.60	−7,917.85
1950	78,471.00	89,671.00	−11,200.00
1951	104,005.60	95,413.00	8,592.00
1952	127,292.00	116,070.00	11,222.00
Total	554,662.86	606,114.97	−51,452.11

Mr. NORRELL. Now, you have carried in the Virgin Islands Corporation, Mr. Davis, as I understand it today, everything we are doing down there, so far as this Government is concerned, except the loans; or do you include that?

Mr. DAVIS. The Corporation includes only those activities that have been covered here in the budget presentation. There are other important Federal expenditures. There is, for example, the grants to the two municipalities, which was covered by Governor de Castro on the previous hearing.

Mr. NORRELL. We appropriate for construction and that would certainly be for the powerplant.

Mr. DAVIS. That was made to the Corporation; the Corporation covers that.

Mr. NORRELL. What I am trying to get at is what is the Federal money we channel down there and the revenues we have derived from down there?

Mr. DAVIS. I think you would be interested in these figures as the result of a study which was made and which information was used recently for another purpose which showed in the last 5 years a total appropriation of about $17 million for the Virgin Islands Corporation, ending with 1953.

Mr. NORRELL. It is a fairly easy thing to go back to its origin and get that information.

Mr. DAVIS. Yes, sir; we can do that for the Corporation, but the point I am making is that appropriations to the Virgin Islands Company or Corporation did not cover all of the Federal expenditures. If you want that, we could include these other things, as well.

Mr. NORRELL. I would like to have that, Mr. Davis. You can include it, if you think it might be available.

Mr. DAVIS. You would like to see the total bill.

Mr. NORRELL. The whole thing, complete.

Mr. DAVIS. Yes, sir.

1952 GROSS REVENUES FROM SUGAR

Mr. NORRELL. Now, the Corporation, as it is known today, has some revenue-producing and some non-revenue-producing activities.

How much money did you actually turn into the Treasury during the last fiscal year, if you have it, from your sugar activities?

Mr. SKEOCH. Last year from the sugar activity only, sir, $1,355,047.27. That is the gross revenue from the sugar.

Mr. NORRELL. That went into the Treasury?

Mr. SKEOCH. It did not go into the Treasury; it went into our revolving fund.

Mr. NORRELL. Went into the revolving fund?

Mr. SKEOCH. Yes, sir.

Mr. NORRELL. You did not turn any into the Treasury; is that right?

Mr. SKEOCH. Except the interest which we paid.

Mr. NORRELL. All the rest of it went into the revolving fund?

Mr. SKEOCH. Yes, sir.

Mr. NORRELL. How much money did you lose last year on the revolving fund?

Mr. SKEOCH. $592,000; sir.

Mr. NORRELL. Can we find out the cost and the disbursements and receipts of the sugar industry, especially the sugar mill, for the last fiscal year? Is there any way to do that?

Mr. SKEOCH. Yes, sir.

Mr. NORRELL. In other words, if I were down there and I owned the sugar mill and I operated it, I would like to know how much I have expended and how much I have received.

Frankly, I want to see if this is a fair example of Government operation of an enterprise where you have the capital stock given to you entirely and then you have to have money from the Federal Treasury to supplement the operating costs. That is not very good business, and so far as I am concerned, I am willing to give it away. If we want to give the Virgin Islands people something, I would like to do that. I want to increase their standard of living, but I do not want to see the Government operate a sugar mill and a sugar plantation where we invest the entire capital stock and capital investment 100 percent and then we cannot make enough money out of it to pay the yearly operation of it.

POWER INVESTMENT

Prior to 2 years ago you did not have any investment in power facilities at all. I believe that is correct; is it not?

Mr. SKEOCH. Except the fact that we were sponsors for an REA program, but we had no investment.

Mr. NORRELL. You would not borrow any money, as I understand it and you wanted to take it over and I opposed it, but the majority of the committee went along and you took it over and you bought the facilities on both islands. I did not think you should have, but it was done. Now you come back here for an appropriation this year of a very considerable amount of money for power—$1,050,000, I believe, overall?

Mr. SKEOCH. Yes, sir.

Mr. NORRELL. That will be added to what you have gotten in the last 2 years. How much would the two previous appropriations, plus this, total?

Mr. SKEOCH. Just in round figures, sir?

Mr. NORRELL. Yes. As I remember, we took the thing over in 2 years' time.

Mr. SKEOCH. Yes.

Mr. NORRELL. In other words, I want the amount of cost heretofore, added to this. What would that be?

Mr. SKEOCH. We have in St. Croix a power investment of $730,000 and in St. Thomas $385,000. The plant at St. Thomas is not owned by us and it is not adequate to produce the current and the essence of this appropriation is to put in needed generating equipment.

Mr. NORRELL. Yes, that is true. I am reasonably confident that something needs to be done to it. I have been down there, you know.

Mr. SKEOCH. Yes, sir.

Mr. NUCKER. An estimate of the total investment in the power program through appropriations last year and the year before, and including the million dollars this year, is slightly over $2 million.

PROFITS FROM POWER OPERATIONS

Mr. NORRELL. That is fine. Can you give me the amount of your receipts from the collection of bills during the last fiscal year?

Mr. NUCKER. During the last fiscal year from the power program, and recognizing that in the last fiscal year it was just getting under way and it was not complete, our total receipts and income from power, 1953, is $380,500.

Mr. NORRELL. What were your operating expenses during that period?

Mr. NUCKER. $331,000, leaving a net income from the power program and profit of $49,500.

Mr. NORRELL. That means out of this investment you have made that much profit?

Mr. DAVIS. On a very small part of the investment. That means approximately $1 million invested by Congress up to the 1954 request. We made $49,000 last year.

Mr. NORRELL. Including the interest on the money and depreciation and everything, that is what you made?

Mr. DAVIS. That is net.

Mr. NORRELL. That would not be considered in private enterprise as a very good investment, would it?

Mr. NUCKER. Congressman Norrell, I would agree it would not be considered a good investment, but the investment will start producing a more realistic profit with the inclusion of both islands in the program.

Mr. NORRELL. It certainly makes a contribution, and I agree with you there, but just how we can continue to go on, I do not know.

SUPPORTING ISLAND ECONOMY

We are saying here that certain things are outright gifts, and that is all right, to improve the economy, but how long are we going to continue to improve the power and the sugar mill and continue to have a deficit? Can private enterprise operate on that basis? Of course, we know it cannot.

Mr. DAVIS. Mr. Chairman, so far as the power program is concerned, according to the best views we can get from our power engineers, it is set up on a perfectly sound, self-liquidating basis, and completely comparable to the Government's power operation on the mainland. The sugar mill operation is admittedly a marginal and probably a losing operation, but the committee simply has to weigh the importance of providing the Islands of St. Croix some sort of support for the economic system until such time as it can become self-supporting. The only alternative would be destitution and relief. The Virgin Islands Corporation directly supports, probably, I would think, 25 percent of the working force of St. Croix and indirectly supports the whole economy of the island.

Mr. NORRELL. I realize that and I appreciate your expression, but is there any other country that is doing what we are doing along these lines for their island possessions?

Mr. DAVIS. Yes, I would say of the major powers which have overseas possessions, they are doing something about comparable to this, at least, Great Britain is in the Caribbean.

Mr. NORRELL. What is Great Britain doing for her Samoa Island out here in the Pacific?

Mr. DAVIS. The New Zealand Government has done a great deal there in providing actual financial support and technical advice and development schemes. The British Government has a development program running into hundreds of millions of dollars for its overseas possessions. It is spread over a longer period of time and is on a smaller scale, but the principle is the same. The same thing is true in the Belgian Congo and the French Congo. It is a generally accepted principle that the metropolitan country should build up and support the industry and economy of their overseas possessions.

Mr. NORRELL. I was in Samoa a few years ago and about all Great Britain was doing was that she had her representative there to act as head of the island and so on, but she had no program like we have in American Samoa.

Mr. SKEOCH. May I give what I think is a comparable example of what you are asking in the form of the support which Britain is giving her possessions? On the British West Indian Island of Antigua, which is 20 square miles larger than our island, the United Kingdom guarantees them a sugar quota of 28,000 tons and further guarantees them a price of $202 per ton.

Mr. NORRELL. I do not see how we can continue to go on doing something that is supposed to be for profit and wake up and find it is not a profit at all.

Mr. SKEOCH. In our case we are not allowed to ship all the sugar we produce.

Mr. NORRELL. I agree with the chairman about your efforts to get tourists down there. Anyone that is able and wants to go to the Virgin Islands is free do to so. One thing that Americans do is travel and you cannot keep them away from the Virgin Islands if they have the money to go. It is a lovely place. I have been there. Anyone who can go, ought to go to the Virgin Islands.

ELECTRIC BILLS

When we went into the power situation a year ago and 2 years ago, we actually found that there were financially able inhabitants that owed electric bills for a year in arrears. That is not a sound business operation. Do you have anything like that today?

Mr. SKEOCH. That has been very much cleared up. There was a condition that existed, but I think in this last year we can say that everything is right up to date.

Mr. NORRELL. Have you discontinued anyone's electricity this year?

Mr. SKEOCH. Yes, sir.

Mr. NORRELL. Well, I think you should keep those bills current. It is not a gift for the people that are able to pay.

Mr. SKEOCH. That is right.

SECURE LOANS

Mr. NORRELL. In regard to your loans, what is the largest loan you have now? Just do the best you can to give me an estimate.

Mr. SKEOCH. About $6,000.

Mr. NORRELL. How old is the oldest loan that you have now? The most aged?

Mr. SKEOCH. About 2½ years.

Mr. NORRELL. Do you consider the loans that are outstanding now as collectible?

Mr. SKEOCH. Yes, sir; I do entirely. We have sound mortgages behind them.

Mr. NORRELL. Do you make any loans and at the time you do not think you will get the money back?

Mr. SKEOCH. I have never; no, sir. I do not think any has been made in the life of the Corporation. There was one loan that was slow and pressure was brought to bear and he is right up to scratch today.

Mr. NORRELL. Before you cancel them out you exhaust all methods available to collect them?

Mr. SKEOCH. Up to now we have written off no loans. We have not lost a penny on the loans.

Mr. NORRELL. Why is it necessary to make an appropriation each year for loans, if you are not losing any?

Mr. SKEOCH. We are not asking any appropriation for loans this year.

Mr. NORRELL. We made an appropriation for that purpose last year, did we not?

Mr. SKEOCH. That is right.

Mr. NORRELL. You are saying to the committee that you have not lost any money on loans since you have been operating and you do not plan to lose any in the future on the loans that you make?

Mr. SKEOCH. That is correct, sir.

POWER DIVISION

Mr. BUDGE. To follow up a little on the inquiry of the gentleman from Arkansas on this power plant, how much per kilowatt does it cost you to produce the power?

Mr. SKEOCH. About 1½ cents.

Mr. BUDGE. What do you market it for?

Mr. SKEOCH. That varies. I have given you the fuel cost of production and you wanted the overall cost of production.

Mr. BUDGE. I want your total cost of production per kilowatt.

Mr. SKEOCH. I do not know that I can give you that figure right off the bat, but I would be glad to supply it for you, but our rates run from 10 cents down to 3 cents, depending on the quantity used.

Mr. BUDGE. Of the profits which you have shown, and of which you are proud, if you would include the taxation item that the people in the United States have to pay in their electric bill, which is collected from the private companies for producing it, I think you would find that the United States has quite a subsidy for the power. Our private power companies in this country pay over one-third of their marketing price in taxes to the Federal Government, but you pay no taxes.

Mr. SKEOCH. Yes; we pay real-property taxes, we pay depreciation, and we pay interest.

Mr. BUDGE. How much do you pay in taxes through the powerplant?

Mr. SKEOCH. Last year on the one plant, we paid $1,526.10.

Mr. BUDGE. On a million-dollar investment you pay a thousand dollars in taxes.

Mr. SKEOCH. No, sir; this whole million dollars is not invested in this one plant. The other portion of it has just been activated.

Mr. BUDGE. How much is in that plant that you pay the thousand dollars in taxes?

Mr. SKEOCH. $270,000.

Mr. BUDGE. I think it is quite plain that your tax burden is negligible, compared to the tax burden in the continental United States, and it would seem to me that you should raise your kilowatt price in your marketing of it, if there is the demand that you state there is for this power, so that you do not subsidize the people in the Virgin Islands to a far greater extent than the people in the United States.

POWER CUSTOMERS

Mr. FENTON. How many customers do you have on St. Thomas Island using electricity?

Mr. SKEOCH. As of December, 3,122.

Mr. FENTON. Are most of those customers in the towns?

Mr. SKEOCH. In the town of St. Thomas; yes.

Mr. FENTON. I notice you have 30 miles of new line, to serve 150 new customers. Just where are those customers? As I remember, the island is not very large and there is not very much population outside of the city.

Mr. SKEOCH. No; but it has some, sir. They are building up more and more further out. Continentals, especially, are coming down there and buying sites and building homes and they require the use of electricity, plus the fact that what we have to do to secure the system and to build lines in loops around to take the load and feed it for the distribution. That is essentially where the 30 miles will be used up.

Mr. FENTON. There is no agricultural use of electricity, is there?

Mr. SKEOCH. Not in St. Thomas to speak of; no, sir.

Mr. FENTON. It is just for homes.

Mr. SKEOCH. Yes, sir; and also there is some industry in dairy farming that requires service.

Mr. FENTON. Are their rates the same as the people in St. Thomas?

Mr. SKEOCH. They pay the same rate, yes, sir.

Mr. FENTON. Are those people required to pay anything toward the extension of these lines?

Mr. SKEOCH. They are required to give a guaranty. In other words, assuming that you have a line which has to be run a mile and you are the only consumer on it, then you have to guarantee $10 or $15 a month, for example, even though your bill might only be $5, until more people are picked up on that line to prorate the investment cost.

Mr. FENTON. Do you have any electrical power at St. Johns?

Mr. DAVIS. Only a small plant, operated by the Caneel Bay people.

Mr. FENTON. Your largest consumers, I imagine, are the hotels?

Mr. DAVIS. Yes, sir. The Caneel Bay people have a small plant, but that is privately owned. In St. Thomas the hotels are the biggest users.

Mr. FENTON. Are all of the homes on St. Thomas electrified?

Mr. SKEOCH. A fair amount of them are. There is a demand for more, but we do not have the generating capacity to take them on. Right now, we are in such a precarious condition, that we cannot take

on any new customers. Two weeks ago 1 of the 3 machines that we have, broke down and we had to throw a whole section of the island, including the airport, out of light. That is essentially our problem there now, to get sufficient generating capacity.

WEDNESDAY, MARCH 11, 1953.

BUREAU OF MINES

WITNESSES

J. J. FORBES, DIRECTOR
H. J. SLOMAN, ASSISTANT TO THE DIRECTOR
L. C. McCABE, CHIEF, FUELS AND EXPLOSIVES DIVISION
PAUL ZINNER, CHIEF, MINERALS DIVISION
JAMES WESTFIELD, CHIEF, HEALTH AND SAFETY DIVISION
W. E. RICE, CHIEF, ADMINISTRATIVE DIVISION
KENFIELD BAILEY, CHIEF, BUDGET AND FINANCE BRANCH

REVISED BUDGET

Mr. FENTON. The committee will come to order. I have a statement to make before the hearing starts.

The committee understands that the Secretary's revised budget submission, now being considered by the Bureau of the Budget, reduces the request for the synthetic liquid fuels program by $2 million, and eliminates the construction funds requested for the experiment station at Minneapolis in the amount of $1,335,000.

In view of the uncertainty with regard to the experiment station, we will disregard this item in the hearing and will, of course, keep the $2 million reduction in mind in connection with synthetic liquid fuels item.

GENERAL STATEMENT

We have with us today the Director of the Bureau of Mines, Dr. Forbes, and his staff, and we will hear their request for funds for fiscal year 1954.

Mr. Forbes, we will be glad to hear from you at this time.

Mr. FORBES. Mr. Chairman, before I start, I think it would be a good idea to introduce our people here, because there may be some of the gentlemen here who do not know them. This is Dr. L. C. McCabe, Chief of the Fuels and Explosives Division; this is James Westfield, Chief of the Health and Safety Division; this is Mr. W. E. Rice, Chief of the Administration Division; Mr. Paul Zinner, here on the end, Chief of the Minerals Division; Mr. Kenfield Bailey, Chief of the Budget and Finance Branch; Mr. H. J. Sloman, Assistant to the Director, and of course, you all know Mr. Sid Larson.

Mr. FENTON. Gentlemen, we are glad to have you.

Mr. FORBES. Mr. Chairman, I have quite a statement this morning, and it deals primarily with accomplishments of the Bureau. Heretofore, as you know, we have had, more or less, generalized statements, and I wanted to present a more comprehensive picture on the work of the Bureau. With your permission, I would like to highlight some of these things because I think it would be helpful to the committee.

What is your wish, Mr. Chairman? Do you want me to just put my statement into the record or start from the beginning?

Mr. FENTON. How long will it take you to go over this statement?

Mr. FORBES. It will not take very long, because I will emphasize highlights, but I would like to have the whole statement included in the record.

Mr. FENTON. We will just insert your statement in the record at this point, and then you can give us the highlights.

(The statement referred to is as follows:)

Mr. Chairman and gentlemen of the committee, I appreciate this opportunity of appearing before you with members of the staff of the Bureau of Mines in support of the estimates for financing the Bureau's activities during the fiscal year 1954.

With industrial orders for the defense mobilization effort moving into high gear, the peak demands for metals, minerals, and mineral fuels are reflected in accelerated use of many of our domestic resources. To counteract this situation new and improved conservation practices must be developed and used. Important among these are better mining methods to increase recovery and reduce waste, improved techniques to increase extraction from ores, improved methods of beneficiation to permit the mining of many unused orebodies or use of presently discarded materials, and the more efficient use of available materials. These measures, together with steps to conserve human life in the mineral industries through continual, vigorous safety and health programs, become increasingly important to our expanding economy.

The Bureau of Mines is keenly aware of the needs, and is contributing its efforts toward the solution of the mineral supply problem through methods and processes developed by its engineers, scientists and technologists. Its budget for fiscal year 1954 is a most conservative estimate to cover only the essential programs in the national interest.

The budget estimate for the Bureau of Mines for the fiscal year 1954 amounts to $29,115,000 as compared with $27,615,000 appropriated for the fiscal year 1953. However, after deducting nonrecurring items totaling $3,523,782 from the 1953 appropriation, the estimate provides for a net increase of $5,023,782. Included in this increase of $5,023,782 is $1,403,560 to provide for enforcement of the new mine safety law known as the Federal Coal Mine Safety Act, which was enacted in the closing days of the 82d Congress and became effective when signed by the President on July 16, 1952. The total requested increase of $5,023,782 is distributed by appropriations as follows: (1) Conservation and development of mineral resources, $1,966,782; (2) Health and safety, $1,450,000; (3) Construction, $1,560,000; and (4) General administrative expenses, $47,000.

The increases recommended for the "Conservation and development of mineral resources" appropriation will provide funds to intensify the Bureau's mineral research program to insure an adequate supply of materials needed for national defense and an expanding domestic econony. Important among items of research are those related to iron ore, tungsten, nickel, cobalt, and rarer elements such as columbium and tantalum; the development of magnesium alloys and processes; recovery of secondary nonferrous metals; beneficiation of asbestos for strategic uses, including studies of asbestos composition and structure and fibrous substitutes; production of synthetic flake mica with emphasis on large crystal growth; beneficiation of phosphate rock; and, fundamental studies of the physical properties of mine rocks.

With respect to mineral fuels, the recommended increases will permit the Bureau to accelerate its studies of new or modified coal mining methods, expand its anthracite field investigations; and, investigate preparation characteristics of the low-grade coals, which are available in large supply, and develop washing techniques to upgrade them to metallurgical quality. Coal studies include testing of gasification properties; studying the carbonizing properties and the yield and quality of coke, gas, and chemical byproducts; and, studying the technology of manufacturing producer gas from certain western coals to provide fuel for generating electric power through the use of the gas turbine. It is necessary to accelerate research on the shooting of oil and injection wells with explosives, and to develop more economical methods of producing synthetic liquid fuels from oil shale and coal.

The major portion of the increase recommended under the "Health and safety" appropriation is to provide funds for the enforcement of the new mine safety law. Enactment of Public Law 552, 82d Congress, imposes new responsibilities on the Bureau. Enforcement of this law cannot be carried out without adequate personnel and auxiliary facilities.

Funds recommended under the "Construction" appropriation will provide for constructing and equipping an experiment station at Minneapolis, Minn.; constructing additional laboratory space at Pittsburgh, Pa., for mine-air and mine-dust analysis in connection with the new mine-safety law; and, minor construction and alterations of synthetic liquid fuels pilot and demonstration plants.

The increase recommended under the "General administrative expenses" appropriation will be used to employ additional administrative personnel in the Washington and regional offices.

Now, with your permission, I should like to tell you about some of the accomplishments of the Bureau of Mines, to bring out the relationship of our past and current work to what we propose to do with the funds requested for the fiscal year 1954.

Fuels

The high standard of living in this country and our preeminent position as a world power is a result of the world's highest production and consumption of energy. The machines of war, the labor-saving devices that make modern living easier, our motor vehicles and the Nation's industrial plant consume vast quantities of energy and require the production of large quantities of energy, which is derived mainly from mineral fuels—coal, petroleum, and natural gas.

Mineral fuels sometimes may be used interchangeably, whereas for some purposes only liquid fuels are satisfactory. The shortages of gasoline and heating oils, which occurred during World War II, are too recent in memory to need repeating. Our entire economy and way of life are geared to the use of liquid fuels at enormous rates.

Petroleum and natural gas

A primary responsibility of the Bureau of Mines is research in the conservation and efficient utilization of petroleum and natural gas. The Bureau's research in natural gas is assisting the gas industry in obtaining more efficient production and transportation of this commodity. Only 40 percent of the oil in the ground is recovered with current production techniques. The Bureau has pioneered and developed primary-production practices which will increase recovery of petroleum from domestic reserves. Extensive field tests have indicated the engineering practices which should be used in new fields to produce the maximum recovery of oil from the ground. In the older oilfields, from which petroleum was obtained before good primary production methods were developed, even larger quantities of oil were left in the ground. The Bureau of Mines has investigated and developed information that has stimulated the use of "secondary recovery" methods which will permit the economic recovery of vast quantities of oil.

The proper spacing of oil wells in a field will not only increase the total amount of oil recovered but will decrease the cost and will conserve steel. The Bureau has investigated the physical factors involved in the proper spacing of wells and is working to provide the petroleum industry with the means of determining proper well-spacing in new fields.

A wealth of information has been published by the Bureau on the composition of crude petroleum and how its component parts can be combined into "tailored" products to increase efficiency of use by the ultimate consumer. By so doing the Bureau is contributing substantially to conservation of the Nation's petroleum resources because the results of this work have the effect of extending the life of those resources.

In 1952 the Bureau of Mines extracted the billionth cubic foot of helium from helium-bearing natural gas produced in Texas, Kansas, and New Mexico. More than half of this was extracted during the last 7 years. Helium has become an important industrial gas useful in the production of titanium and in welding many metals, which were difficult to weld without helium. The Navy has continued its use of large quantities of helium as the lifting gas in lighter-than-air craft. The demand for helium is expected to continue to rise rapidly, and the Bureau has plans to meet the increased demands.

COAL

The Nation's total coal reserves are adequate to supply our energy requirements for many years. The higher-rank coals, which are suitable for making metallurgical coke, are becoming more difficult to find, and these are as necessary to the production of steel as iron ore. At the request of the Munitions Board, the Bureau of Mines has surveyed the reserves of coking coal in Pennsylvania and West Virginia and is extending this activity to other coal areas. The reserves of coking coals can be increased by cleaning certain substandard coals to upgrade them to metallurgical quality. Research is being conducted on improved methods for upgrading such coals, and on methods of blending so that our resources of this important commodity may be extended.

Conservation of our valuable reserves depends largely on improved mining methods. On the average, 50 percent of the coal is left in the ground by our present mining methods. The Bureau of Mines has developed methods of improving the percentage of recovery and for reducing mining costs. The Bureau has cooperated with the coal-mining industry in the introduction of new mining machinery to increase the percentage of coal recovery and decrease mining costs.

The depletion of the higher-rank coals, particularly in the Appalachian region, has pointed to the eventual necessity of using the enormous reserves of the lower-rank western coals. The Bureau has developed an economic process for using lignite, which can compete favorably with natural gas in areas such as Texas, where natural gas is relatively cheap. This process is being developed commercially by one company and will have far-reaching significance in the conservation of our natural-gas reserves, and in promoting the use of lower-grade fuels.

SYNTHETIC LIQUID FUELS

The restrictions on the uses of liquid fuels during World War II were of deep concern to the Congress, and, in 1944, it initiated a synthetic liquid-fuels program. The continued high demand for petroleum products, the increasing consumption of foreign oil, and the greater cost of finding new domestic sources have emphasized the ultimate probability of using coal and oil shale to produce synthetic liquid fuels.

Through Bureau research and cooperation of industry, processes have been developed to produce synthetic liquid fuels from either coal or oil shale. The Bureau has made significant progress in demonstrating that either raw material will yield satisfactory liquid fuels comparable to those obtained from petroleum.

Concurrently with research on the retorting of oil shale and refining of shale oil, the Bureau has developed oil-shale drilling techniques and mining machinery that reduced the overall production costs to 50 cents per ton, including the cost of crushing the shale for the retorting plant. The Bureau also has designed and operated an improved shale-retorting method, which now has been expanded to demonstration-scale size. The method uses a minimum of mechanical equipment and cooling water, which is particularly important in arid regions of the West, in which the principal oil-shale reserves are situated. The improved mining, retorting, and refining methods developed by the Bureau indicate that synthetic liquid fuels from oil shale are approaching a unit cost competitive with similar products from petroleum.

The synthetic liquid fuels coal-to-oil research has resulted in the development of design data and improved operating techniques that may be adapted to commercial synthetic liquid-fuels operations. These improvements, which are being incorporated in the operation of the demonstration coal-to-oil plant, will result in lower prices for the final products.

Coals from five States have been processed in the demonstration plant and, although the composition of the coals varied widely, satisfactory liquid fuels and other oils were produced with relative ease owing to the versatility of synthetic liquid fuels operations.

In producing synthetic liquid fuels from coal, one of the largest cost items is the manufacture of synthesis gas—a mixture of carbon monoxide and hydrogen—for the process. A gas-synthesis process developed by the Bureau, which has been carried through various stages from laboratory up to demonstration-scale of approximately 50 barrels per day, produces gasoline and diesel fuel. Improvements being made include equipment changes and the substitution of a better catalyst developed by the Bureau. These changes are expected to result in more efficient plant operations and reduced costs.

The initial Bureau development of a process to gasify virtually all ranks of coal with oxygen and steam at atmospheric pressure greatly broadened the range of

raw materials available for producing synthetic liquid fuels. Bureau emphasis recently has been on the pressure gasification of coal which results in reduced costs of synthesis gas. Successful pilot-plant operations have been carried out with pressures up to 450 pounds per square inch. Aside from reduced costs in producing synthesis gas, this process results in increased coal throughputs. This development may have far-reaching significance in the chemical industry because synthesis gas is the raw material used to produce many chemicals, one of the most important of which is synthetic ammonia.

RESEARCH ON EXPLOSIONS

The manufacture, transportation, and storage of combustible gases, vapors, dusts, and powders constitute potential explosion hazards in thousands of industrial plants. During this century some 900 dust explosions have caused more than 500 deaths and about $80 million in property damage. Gas explosions have been equally or more devastating in character.

Applying the knowledge gained in the Bureau's research on coal-mine-explosion phenomena, studies have been made to determine the basic causes and the mechanism of industrial explosions. The explosive properties of several industrial gases have been determined at pressures ranging from subatmospheric to over 1,000 pounds per square inch, and temperatures from $-105°$ to $+500°$ F.

At the request of the Department of Defense, considerable research has also been performed to determine the effect of altitude on the ignitibility of aviation fuels and to determine the flammability limits of such fuels in the presence of varying proportions of inert gases.

Because of the preeminence of the Bureau of Mines in the field of gas and dust explosions, it is being continually consulted on matters relating to safety and the development of safety codes for new industrial operations. The present research programs are designed to furnish the basic data necessary to meet the needs of the military as well as industry.

Safety and Conservation

MINE SAFETY

Public Law 552, 82d Congress, created for the Bureau many technical, procedural, and legal problems not encountered before its effective date. The law also provides for a cooperative plan of joint Federal-State inspection. These provisions, among others, place new and additional duties and responsibilities upon the Bureau, which will require increases in the Bureau's inspection and engineering personnel, as detailed in the budget estimates, which have been submitted.

This law is designed to prevent major disasters in coal mines. Major disasters have, however, caused less than 10 percent of the fatalities in coal mines; it is apparent that other steps must be taken to prevent the remaining 90 percent or more of the fatalities. In addition to the inspection of mines and requirements or recommendations for minimizing or eliminating hazards, education of supervisors and workers is an effective method of preventing accidents in the coal-mining industry by training them to recognize and to correct dangerous conditions and practices. During the past 6 years more than 270,000 supervisors and workers in coal mines have been trained in accident prevention by Bureau instructors.

During the first 6 months of operation under the new Federal Coal Mine Safety Act, approximately 2,600 violations were observed by our inspectors. Although these violations were eventually corrected, the large number clearly indicates the need for a more intensified inspection program.

It is noteworthy to mention that in 1952, 925 fewer men were killed in the coal mines of the United States than in 1942, which was the first full year in which Federal inspection of coal mines was authorized. At that time compliance with the recommendations of the Federal inspectors was voluntary. The 1952 fatality record was the best in the history of the coal-mining industry; it is, however, still too high and our ultimate goal will continue to be the elimination of all accidents.

The greatly increased activity in metal and nonmetal mining, petroleum, and quarrying industries during recent years has resulted in more requests for the Bureau's assistance in accident prevention and safety educational programs than the available personnel could handle. Since the establishment of the Bureau by Congress in 1910, more than 1,860,000 persons in the mineral and allied industries have been trained in first-aid and mine-rescue methods by Bureau instructors.

CONSERVATION

Since 1949 the Bureau has been engaged in an important fuel-conservation activity by controlling fires in inactive coal deposits. Engineers of the Bureau have investigated 129 fires in inactive coal deposits on private lands and the public domain, which have consumed many million tons of coal. Twenty-six such fires have been controlled or are being controlled. It is estimated that 214 million tons of coal have been conserved through this activity at a cost to the Government of less than 1 cent per ton. Many of these fires have burned for years on the public domain in the West and on private lands mainly in the East. We have an obligation to future generations to prevent this waste and to conserve this valuable resource.

Another important conservation activity undertaken several years ago by the Bureau is a study to obtain factual information relating to the health, safety, and economy as affected by the encroachment of water that progressively floods the mines in the anthracite region of Pennsylvania. The safety of the men who work in these mines is menaced by the hazard of impounded water. Five men were drowned from this cause in 1952. Moreover, many mines have been abandoned because the encroachment of water made continued operation economically unsound.

MINERALS AND METALS

In the field of minerals and metals the Bureau is concerned with problems of supply and use of more than 80 mineral commodities. The problems are highly diversified, ranging from investigations of ore-extraction techniques to alloying-metal processes and fabrication. The Bureau's activities in this field have resulted in accomplishments of significant importance to the mineral industries and the national welfare. I thought, therefore, that it would interest you to mention briefly some of the Bureau's work in this field.

FERROUS METALS AND ALLOYS

Several ore deposits, which were developed by Bureau field projects a few years ago, are now important producers of cobalt and tungsten. Outstanding examples are the Blackbird cobalt deposit in Idaho, and the Tem Piute tungsten deposit in Nevada. Production of nickel, now the most critical of the alloying metals in general use, will soon be started at the Oregon laterite deposits. These deposits were investigated by the Bureau both from the standpoint of ore reserves and metallurgical methods and the metallurgical process developed by this research will be used by the operating company. Similar work has been initiated at copper, nickel, and cobalt deposits in Lake County, Minn.

Many Bureau projects have contributed to the know-how which has maintained the acknowledged leadership of our mineral industries. An example is the work of the Bureau on methods of producing pure molybdenum needed for components of jets, rockets, and other power plants that operate at very high temperatures. Similarly the research on laterite ores of Oregon and Washington has enabled the Bureau of Mines to supply technical assistance regarding the Cuban laterites that give promise as an important source of iron, nickel, chromium, and cobalt.

The steel industry produces upward of 10 million tons of open-hearth slags annually containing enough manganese to make the United States less dependent on foreign sources of this metal if it could be recovered economically. In cooperation with the American Iron and Steel Institute, the Bureau of Mines, during 1952, developed a practicable method for extracting this manganese, which will be an important source of this commodity in an emergency. The economics of the process, while yet unsolved, is being studied; preliminary estimates indicate that the costs are above the world market price for manganese but below the subsidy payments now being made for domestic ores.

Research of the Bureau in cooperation with industry has developed an electrometallurgical process that may provide the most economical means of using off-grade domestic deposits of chromite for producing special grades of ferrochrome.

COPPER, LEAD, AND ZINC

Prevention of the waste or misuse of nonferrous scrap metal is the ultimate objective of a long-term research program, which already has yielded results of practical usefulness. A number of processes for recovering and refining base and light metals from low-grade scrap are being developed in Bureau laboratories

and appear promising for industrial application. Numerous ore deposits, particularly in the Western States, containing lead, zinc, and copper, that are not recoverable by conventional processes of treatment, are not being worked. These metallurgical problems have been and are under investigation and considerable progress has been made as, for example, in the develpoment of leaching and electrolytic deposition processes.

Compilations of mineral exploration and mining data in the tri-State district of Missouri, Oklahoma, and Kansas, and in the upper Mississippi Valley (Wisconsin, Illinois, and Iowa), which have been assembled gradually in past years by the Bureau of Mines, have proved their usefulness to industry and Government in connection with the recent exploration programs. These projects should be continued so that the atlases can be maintained and extended as rapidly as possible, and similar projects are contemplated in other parts of the country.

ALUMINUM

The development of a process for utilizing low-grade aluminous ores that are found in abundance within the United States is a necessity, not only as a measure for increasing national self-sufficiency in raw materials for aluminum production, but also for conservation and maximum utilization of domestic resources. Despite extensive exploration for bauxite in the United States reserves of such ores are inadequate to support the domestic aluminum industry and most of our bauxite requirements is imported. During World War II the Bureau of Mines conducted extensive research on a laboratory and small pilot-plant scale, which demonstrated that alumina could be recovered from clays and other aluminum silicate materials.

Four demonstration plants for treating low-grade aluminous ores were built by the Government during World War II. Three of these plants were converted to other uses, but in 1952 the Bureau of Mines completed the construction and rehabilitation of the fourth, the Laramie alumina plant. Initial tests on treatment of anorthosite, an ore deposited in immense tonnages in adjacent areas, were made during 1952 and investigations are being continued on the technology, equipment, economics, and product purities leading to aluminum production from nonbauxitic materials.

TITANIUM

One of the Bureau of Mines' outstanding metallurgical developments in recent years has led to the establishment of the ductile titanium industry. Titanium, a corrosion-resistant metal about half as heavy as steel and possessing the same strength, was virtually a laboratory curiosity a short time ago. Commercial production in 1952, based on the Bureau's process, was over 1,000 tons; this is, however, not adequate to supply the present requirements of defense agencies. Numerous prototypes of military items have been constructed of titanium by the Bureau. Because of the abundance of domestic titanium ores the Bureau will continue to promote further growth of this new industry to develop extensive peacetime as well as military uses of titanium.

ZIRCONIUM

The Bureau of Mines has pioneered the production of zirconium on a commercial basis. Because zirconium is highly resistant to corrosion, heat, and radiation, it is used as a structural material for nuclear reactors and is destined to play an important role in the harnessing of nuclear power. It is also of great interest to engineers seeking a metal that can withstand terrifically high temperatures in the combustion chambers of jet engines and super rockets. The major effort of the Bureau's work on zirconium is to develop a continuous process to produce ductile zirconium and reduce its current production cost of $15 a pound

GERMANIUM

The "sparkplug" of the much-heralded revolution in electronics is a semiconductor device known as the transistor, the vital element of which is a small pellet of germanium metal. Purity of the metal is the controlling factor of this utilization of germanium, and only with prolonged and tedious treatment can production of the metal in the necessary state of high purity be currently accomplished; this costly treatment process is the major factor in the present price of $340 a pound. Bureau research is directed toward the development of better methods of producing germanium of necessary purity, and increasing recovery of the metal from mineral source materials.

SELENIUM

The Bureau's research on selenium is directed toward the development of new sources of the metal and increased metallurgical efficiency in its recovery. This technologic effort is of outstanding importance inasmuch as selenium is included among the critical and strategic materials that have been in short supply throughout 1952 and has been under allocation by the National Production Authority since December 10, 1951. The metal is used in the manufacture of selenium rectifiers, which are semiconductor devices used in radio and television sets and in numerous military applications to replace bulky transformers and rectifying vacuum tubes for the conversion of alternating current to direct current. Selenium is also used in the production of stainless steel to improve its machinability, as a decolorizer in the glass industry, and for diversified chemical purposes.

SYNTHETIC MICA

The Bureau of Mines, in cooperation with agencies of the Department of Defense, has concluded preliminary investigations of synthetic mica to replace highly strategic mica now largely imported from India and Brazil. Research is continuing to obtain a higher yield of usable sheet mica by promoting larger crystal growth for electrical and other strategic uses.

BUILT-UP TALC BLOCK

During World War II, electronic-equipment manufacturers were plagued by shortages of essential block talc obtained primarily from India. Threatened communication breakdowns were averted by expensive air transportation of Indian bloc talc at a time when air priorities were especially hard to obtain. The Bureau's work is expected to do much toward eliminating dependence on foreign sources.

BERYLLIUM

Beryllium production from domestic deposits is less than 15 percent of our requirements, which have been augmented by new atomic-energy applications and defense demands. To supplement the usual hand-cobbing methods for the production of domestic beryl, the Bureau is developing mechanical means of beneficiation by flotation and two other processes to increase the workable reserves of domestic, low-grade beryl deposits and reduce our dependence on foreign sources.

KYANITE (MULLITE)

Superduty mullite refractories for special purposes now are obtained almost entirely from strategic Indian kyanite. To make the United States independent of foreign supplies that might become unavailable in a future emergency, the Bureau of Mines some time ago initiated a research program on synthetic mullite, which has resulted in producing synthetic mullite from the plentiful low-grade siliceous bauxite and other materials in the southeastern United States.

RARE-EARTH METALS

The so-called rare-earth metals, which, incidentally, are neither rare nor earths, occur principally in the mineral form of monazite and, prior to 1950, were obtained almost entirely from foreign sources. Export restrictions imposed by India and Brazil, the two major producers, has led to a search for domestic ores. The Bureau of Mines in cooperation with the Atomic Energy Commission has located and developed large minable deposits of monazite in Idaho and North and South Carolina. Production of monazite sands has started in Idaho, and another operation in South Carolina will begin producing during 1953. Exploration and development of monazite deposits should continue in fiscal year 1954 in Alaska, Idaho, Montana, Nevada, Wyoming, North Carolina, South Carolina, Georgia, and Florida.

COLUMBIUM-TANTALUM

The demand for ferrocolumbium-tantalum in military aircraft and for other important defense uses has far exceeded our present supply of columbium-tantalum-bearing minerals. We are dependent on foreign sources for more than 99 percent of our requirements. The Bureau is developing metallurgical processes to improve the recovery of columbium-tantalum from tin slags, at the present time our largest potential source of these metals. As a result of the

Bureau's investigations, new domestic sources are being developed in the Kings Mountain, N. C., spodumene belt, and in the Black Hills deposits of South Dakota. An investigation to recover columbium-tantalum from bauxite ores and titanium deposits in Arkansas is being conducted by the Bureau. Placer deposits are being investigated as sources of columbium and tantalum as well as metallurgical processes to recover and separate the metals.

TIN REFINING

A small electrolytic tin refinery, designed and built by the Bureau of Mines for the Atomic Energy Commission, has recovered a substantial quantity of refined tin from alloy scrap produced in the operations of the AEC's Hanford plant. Considerable advances were made during this operation in perfecting the technique of electrolytic refining of tin, a process that might eventually have extensive industrial application.

UNCLASSIFIED MINERALS RESEARCH

Some Bureau research is not readily classifiable into commodity categories. It is undertaken to solve problems in fundamental or applied science, which will benefit the mineral industries. In general, it is concerned with discovering and developing more efficient ways of getting minerals out of the ground, new and improved means of extracting minerals and metals from their ores, and more effective ways of using mineral products. Sometimes we draw upon scientific work in other fields and apply their results to minerals. In other cases we approach our problems through hitherto unexplored channels, striving to uncover the secrets that will provide the key to yet another of nature's mineral treasure chests.

During the past year we have made encouraging progress in developing new methods of extractive metallurgy. Our research on the use of diamonds in core-drilling bits has been rewarding. We have obtained many fundamental data on the properties of minerals and metals and on the physical principles that govern the structure and movement of rocks in the earth and their effect on mining.

In fiscal year 1954 we propose to continue to probe these fields of minerals research for new facts, placing additional emphasis on the application of physics to mining, because the results of this study can be of tremendous value in increasing safety, efficiency, and economy in the mineral industries.

CONCLUSION

I have touched only on parts of the Bureau's work to give you an idea of what we have done with the funds that have been appropriated to discharge our responsibilities and what we intend to do with the money that we are requesting to carry on.

In closing, it seems appropriate for me to mention that the results of all of the Bureau's research, investigation, and testing, eventually reach the various segments of the mineral industries in the form of Bureau publications, reports, or advice so that the industries in particular and the public in general are benefitted by the Bureau's expenditure of public funds.

Mr. FORBES. With industrial orders for the defense-mobilization effort moving into high hear, the peak demands for metals, minerals, and mineral fuels are reflected in accelerated use of many of our domestic resources. To counteract this situation, new and improved conservation practices must be developed and used. Important among these are better mining methods to increase recovery and reduce waste, improved techniques to increase extraction from ores, improved methods of beneficiation to permit the mining of many unused ore bodies or use of presently discarded materials, and the more efficient use of available materials. These measures, together with steps to conserve human life in the mineral industries through continual, vigorous safety and health programs, become increasingly important to our expanding economy.

The major portion of the increase recommended under the "Health and safety" appropriation is to provide funds for the enforcement of

the new mine-safety law. Enactment of Public Law 552, 82d Congress, imposes new responsibilities on the Bureau. Enforcement of this law cannot be carried out without adequate personnel and auxiliary facilities.

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COAL

I want to emphasize this item under coal. The Nation's total coal reserves are adequate to supply our energy requirements for many years. The higher rank coals, which are suitable for making metallurgical coke, are becoming more difficult to find, and I want to emphasize that. These are as necessary to the production of steel as iron ore. At the request of the Munitions Board, the Bureau of Mines has surveyed the reserves of coking coal in Pennsylvania and West Virginia and is extending this activity to other coal areas. The reserves of coking coals can be increased by cleaning certain substandard coals to upgrade them to metallurgical quality. Research is being conducted on improved methods for upgrading such coals, and on methods of blending so that our resources of this important commodity may be extended.

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Now, unless you desire me to do so, I think I will skip over the coal-mine inspection and safety work, because it was covered so thoroughly during the hearing on the supplemental appropriation for the fiscal year 1953.

Mr. FENTON. That is right.

RESEARCH ON EXPLOSIONS

Mr. FORBES. The manufacture, transportation, and storage of combustible gases, vapors, dusts, and powders constitute potential explosion hazards in thousands of industrial plants. During this century some 900 dust explosions have caused more than 500 deaths

and about $80 million in property damage. Gas explosions have been equally or more devastating in character.

Applying the knowledge gained in the Bureau's research on coal-mine-explosion phenomena, studies have been made to determine the basic causes and the mechanism of industrial explosions. The explosive properties of several industrial gases have been determined at pressures ranging from subatmospheric to over 1,000 pounds per square inch, and temperatures from minus 105° to plus 500° F.

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Because of the preeminence of the Bureau of Mines in the field of gas and dust explosions, it is being continually consulted on matters relating to safety and the development of safety codes for new industrial operations. The present research programs are designed to furnish the basic data necessary to meet the needs of the military as well as industry.

CONSERVATION

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FLOOD CONTROL

I do want to talk about this flood-control work a little. I want to say that so far as our flood-control work goes, this will wind it up. I am very anxious that this work be terminated by the end of the 1954 fiscal year. The main field work, of course, has been practically completed, and about all we have to do now is to clean up some odds and ends in the field and then prepare the final report.

MINERALS AND METALS

The important parts in my statement relate not only to fuels and explosives, but also to minerals and metals.

In the field of minerals and metals the Bureau is concerned with problems of supply and use of more than 80 mineral commodities. The problems are highly diversified, ranging from investigations of ore-extraction techniques to alloying-metal processes and fabrication. The Bureau's activities in this field have resulted in accomplishments of significant importance to the mineral industries and the national welfare. I thought, therefore, that it would interest you to mention briefly some of the Bureau's work in this field.

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producers of cobalt and tungsten. Outstanding examples are the Blackbird cobalt deposit in Idaho, and the Tem Piute tungsten deposit in Nevada. Production of nickel, now the most critical of the alloying metals in general use, will soon be started at the Oregon laterite deposits. These deposits were investigated by the Bureau both from the standpoint of ore reserves and metallurgical methods, and the metallurgical process developed by this research will be used by the operating company. Similar work has been initiated at copper, nickel, and cobalt deposits in Lake County, Minn.

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Research of the Bureau in cooperation with industry has developed an electrometallurgical process that may provide the most economical means of using off-grade domestic deposits of chromite for producing special grades of ferrochrome.

The research and investigation, as I understand it, in obtaining manganese from slag is about finished and the only thing to be done is for the steel companies to participate in working out the economics of the process. The manganese-from-slag process is a very important contribution that the Bureau has made in the last year and a half to 2 years.

COPPER, LEAD, AND ZINC

Prevention of the waste or misuse of nonferrous scrap metal is the ultimate objective of a long-term research program which already has yielded results of practical usefulness. A number of processes for recovering and refining base and light metals from low-grade scrap are being developed in Bureau laboratories and appear promising for industrial application. Numerous ore deposits, particularly in the Western States, containing lead, zinc, and copper, that are not recoverable by conventional processes of treatment, are not being worked. These metallurgical problems have been and are under investigation and considerable progress has been made as, for example, in the development of leaching and electrolytic deposition processes.

Compilations of mineral exploration and mining data in the tri-State district of Missouri, Oklahoma and Kansas, and in the Upper Mississippi Valley, which includes, Wisconsin, Illinois, and Iowa, which have been assembled gradually in past years by the Bureau of Mines, have proved their usefulness to industry and Government in connection with the recent exploration programs. These projects should be continued so that the atlases can be maintained and extended as rapidly as possible, and similar projects are contemplated in other parts of the country.

ALUMINUM

This next item is a very important one and I want to emphasize that the Congress gave us money last year and the year before to develop a process for obtaining alumina from the anorthosite rock of southern Wyoming. I am very happy to report to you gentlemen that that work is progressing in very good shape. I think you were out there, Mr. Culp, and we are very well pleased at the way that plant is working out and if we are going to produce, and I am pretty sure we will, alumina as the end product, we are going places, because there are almost unlimited sources of anorthosite rock that analyses in the neighborhood of 26 to 28 percent aluminum. Is that right, Paul?

Mr. ZINNER. Yes, sir.

Mr. FORBES. There are great possibilities with that project at Laramie.

Mr. FENTON. What kind of rock did you call that?

Mr. FORBES. Anorthosite.

The development of a process for utilizing low-grade aluminous ores that are found in abundance within the United States is a necessity, not only as a measure for increasing national self-sufficiency in raw materials for aluminum production—heretofore it came from bauxite, but this is coming from the clays which are different—but also for conservation and maximum utilization of domestic resources. Despite extensive exploration for bauxite in the United States, reserves of such ores are inadequate to support the domestic aluminum industry, and most of our bauxite requirements are imported. During During World War II the Bureau of Mines conducted extensive research on a laboratory and small pilot-plant scale, which demonstrated that alumina could be recovered from clays and other aluminum silicate materials.

Four demonstration plants for treating low-grade aluminous ores were built by the Government during World War II. Three of these plants were converted to other uses, but in 1952 the Bureau of Mines completed the construction and rehabilitation of the fourth, the Laramie Alumina Plant. Initial tests on treatment of anorthosite, an ore deposited in immense tonnages in adjacent areas, were made during 1952 and investigations are being continued on the technology, equipment, economics, and product purities leading to aluminum production from nonbauxite materials.

TITANIUM

Here is another item that I am pretty enthusiastic about. I have spent most of my life in health and safety work, and chiefly with respect to coal mines, and I want to tell you these activities have

certainly impressed me. An example is the job on titanium that the Bureau of Mines has done.

One of the Bureau of Mines' outstanding metallurgical developments in recent years has led to the establishment of the ductile titanium industry. I am not trying to sell you gentlemen on this, but I do want to show you this material.

That [indicating] is metallic titanium that the Bureau, starting from scratch, has produced from titanium ore, and some companies are trying to produce similar material.

Mr. FENTON. This is not a silver dollar, is it?

Mr. FORBES. It looks like it, but it is worth more than a silver dollar. Titanium in sponge form is worth $5 a pound and in sheet form it is worth $15 a pound. It is about half the weight of steel and approximately the same strength and is noncorrosive. I can see wonderful possibilities for it; when, I do not know, but I predict that it will have widespread use some of these days. When we come to that part of our presentation, Mr. Zinner will supply you with some very interesting information on titanium.

Titanium, a corrosion-resistant metal about half as heavy as steel and possessing the same strength, was virtually a laboratory curiosity a short time ago. Commercial production in 1952, based on the Bureau's process, was over 1,000 tons; this is, however, not adequate to supply the present requirements of defense agencies. Numerous prototypes of military items have been constructed of titanium by the Bureau. Because of the abundance of domestic titanium ores the Bureau will continue to promote further growth of this new industry to develop extensive peacetime as well as military uses of titanium.

ZIRCONIUM

Here is another metal that arouses my enthusiam. Do we have any samples of zirconium with us?

Mr. ZINNER. No, sir; I do not believe so.

Mr. FORBES. The Bureau of Mines has pioneered the production of zirconium on a commercial basis. Because zirconium is highly resistant to corrosion, heat, and radiation, it is used as a structural material for nuclear reactors and is destined to play an important role in the harnessing of nuclear power. It is also of great interest to engineers seeking a metal that can withstand terrifically high tem-temperatures in the combustion chambers of jet engines and super-rockets. The major effort of the Bureau's work on zirconium is to develop a continuous process to produce ductile zirconium and reduce its current production cost of $15 a pound.

By pioneering the production of zirconium the Bureau has made it possible to produce it on a commercial basis. That is the way I like to see the Bureau of Mines operate; do the fundamental research work and after proving the practicability, let industry take it over and develop it. Virtually all of this work is being done in cooperation with the Atomic Energy Commission.

GERMANIUM

The spark plug of the much-heralded revolution in electronics is a semiconductor device known as the transistor, the vital element of which is a small pellet of germanium metal. Purity of the metal is

the controlling factor of this utilization of germanium, and only with prolonged and tedious treatment can production of the metal in the necessary state of high purity be currently accomplished; this costly treatment process is the major factor in the present price of $340 a pound. Bureau research is directed toward the development of better methods of producing germanium of necessary purity, and increasing recovery of the metal from mineral source materials.

Here is a sample of germanium. A promising source of germanium is the ash of certain coals. I hope that this will develop into helping the coal industry, which is pretty much in the "bow-wow" stage at the present time.

SELENIUM

The Bureau's research on selenium is directed toward the development of new sources of the metal and increased metallurgical efficiency in its recovery. This technologic effort is of outstanding importance inasmuch as selenium is included among the critical and strategic materials that have been in short supply throughout 1952 and has been under allocation by the National Production Authority since December 10, 1951. The metal is used in the manufacture of selenium rectifiers, and Mr. Zinner will show you some of these rectifiers and how small a rectifier can be made with selenium. They are semiconductor devices used in radio and television sets and in numerous military applications to replace bulky transformers and rectifying vacuum tubes for the conversion of alternating current to direct current. Selenium is also used in the production of stainless steel to improve its machinability, as a decolorizer in the glass industry, and for diversified chemical purposes.

SYNTHETIC MICA

I wish I had more time to talk about this, but Mr. Zinner will elaborate on it. We have made great strides in the production of synthetic mica.

BERYLLIUM

Beryllium production from domestic deposits is less than 15 percent of our requirements, which have been augmented by new atomic energy applications and defense demands. To supplement the usual hand-cobbing methods for the production of domestic beryl, the Bureau is developing mechanical means of beneficiation by flotation and two other processes to increase the workable reserves of domestic, low-grade beryl deposits and reduce our dependence on foreign sources.

RARE-EARTH METALS

I think I will just highlight a little on the rare-earth materials. The Bureau's activities along this line are really just coming into being. Money was appropriated last year by the Congress for a rare-earth experiment station at Reno, Nev. I think the work there will be very important, because so little is known about the properties of some of these rare-earth materials.

The so-called rare-earth metals, which, incidentally, are neither rare nor earths, occur principally in the mineral form of monazite and, prior to 1950, were obtained almost entirely from foreign sources.

Export restrictions imposed by India and Brazil, the two major producers, has led to a search for domestic ores. The Bureau of Mines in cooperation with the Atomic Energy Commission has located and developed large minable deposits of monazite in Idaho and North and South Carolina. Production of monazite sands has started in Idaho, and another operation in South Carolina will begin producing during 1953. Exploration and development of monazite deposits should continue in fiscal year 1954 in Alaska, Idaho, Montana, Nevada, Wyoming, North Carolina, South Carolina, Georgia, and Florida.

COLUMBIUM-TANTALUM

A rare metal combination that is coming into prominence is columbium-tantalum.

The demand for ferrocolumbium-tantalum in military aircraft and for other important defense uses has far exceeded our present supply of columbium-tantalum-bearing minerals. We are dependent on foreign sources—I want to emphasize this—for more than 99 percent of our requirements. The Bureau is developing metallurgical processes to improve the recovery of columbium-tantalum from tin slags, at the present time our largest potential source of these metals. As a result of the Bureau's investigations, new domestic sources are being developed in the Kings Mountain, N. C., spodumene belt, and in the Black Hills deposits of South Dakota. An investigation to recover columbium-tantalum from bauxite ores and titanium deposits in Arkansas is being conducted by the Bureau. Placer deposits are being investigated as sources of columbium and tantalum as well as metallurgical processes to recover and separate the metals.

Now, that, gentlemen, concludes my statement.

I want to say, gentlemen, before we proceed that I have tried to make this presentation as near as possible in the concrete, because it is tough trying to visualize these things in the abstract. It is difficult for me and I know it is difficult for you.

We have here quite a number of exhibits that I think will give you a fairly good idea, especially on the minerals. It is hard to prepare exhibits for coal, except for mining methods and it is extremely difficult to prepare anything with respect to health and safety, because it does not lend itself easily to visual presentation. However, we have a number of exhibits of minerals and metals, which I know will be very helpful to you.

That completes my statement.

Mr. FENTON. I am glad you dwelt particularly on the metals, because I think that is very important, and as we go along, we will refer to your statement in detail.

Now, you are attempting to justify an appropriation for the Bureau of Mines for fiscal 1954 of $29,115,000, which is an increase of $1½ million over 1953.

Mr. FORBES. That is correct, Mr. Chairman.

Conservation and Development of Mineral Resources

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$17,443,603	$18,657,000	$20,500,000
Transferred to "Salaries and expenses, defense production activities, Interior," pursuant to Public Law No. 253	−44,000		
Adjusted appropriation or estimate	17,399,603	18,657,000	20,500,000
Reimbursements from non-Federal sources	2,690	2,690	2,690
Reimbursements from other accounts	390,983	888,780	888,780
Total available for obligation	17,793,276	19,548,470	21,391,470
Unobligated balance, estimated savings	−234,908		
Obligations incurred	17,558,368	19,548,470	21,391,470

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct obligations			
Appropriated funds:			
1. Fuels:			
(a) Coal	$1,959,199	$2,109,628	$2,472,558
(b) Petroleum and natural gas	1,302,912	1,343,356	1,518,356
(c) Synthetic liquid fuels	7,292,375	7,630,304	7,905,304
(d) Helium	90,112	90,795	90,795
2. Minerals and metals:			
(a) Ferrous metals and alloys	2,128,369	1,793,719	2,366,446
(b) Nonferrous metals	2,687,318	3,585,125	3,805,675
(c) Nonmetallic minerals	735,717	833,294	1,019,799
(d) Mineral research, unclassified	613,269	915,854	966,142
3. Control of fires in inactive coal deposits	355,424	354,925	354,925
Total obligations from apporpriated funds	17,164,695	18,657,000	20,500,000
Reimbursements from non-Federal sources:			
4. Replacement of personal property sold	2,690	2,690	2,690
Total direct obligations	17,167,385	18,659,690	20,502,690
Obligations payable out of reimbursements from other accounts			
1. Fuels	363,943	319,000	319,000
2. Minerals and metals	27,040	569,780	569,780
Total obligations payable out of reimbursements from other accounts	390,983	888,780	888,780
Obligations incurred	17,558,368	19,548,470	21,391,470

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions	2,966	3,215	3,496
Full-time equivalent of all other positions	82	89	112
Average number of all employees	2,549	2,901	3,168
Average salaries and grades:			
General schedule grades:			
Average salary	$4,641	$4,722	$4,793
Average grade	GS-6.9	GS-6.9	GS-7.3
Crafts, protective, and custodial grades:			
Average salary	$3,135	$3,168	$3,226
Average grade	CPC-4.7	CPC-4.6	CPC-4.6
Ungraded positions: Average salary	$3,732	$3,903	$3,617
Personal service obligations:			
Permanent positions	$10,900,930	$12,558,224	$13,770,622
Part-time and temporary positions	360,413	397,472	498,687
Regular pay in excess of 52-week base	47,155	51,286	56,360
Payment above basic rates	206,082	213,422	286,041
Total personal service obligations	11,514,580	13,220,404	14,611,710

Obligations by objects—Continued

Object classification	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
01 Personal services	$11,183,427	$12,809,124	$14,200,430
02 Travel	335,490	348,614	398,000
03 Transportation of things	477,629	418,529	450,000
04 Communication services	142,950	143,178	148,000
05 Rents and utility services	406,728	403,048	422,000
06 Printing and reproduction	182,476	199,925	214,000
07 Other contractual services	1,062,200	1,065,559	1,119,345
08 Supplies and materials	2,031,089	2,135,282	2,267,000
09 Equipment	1,305,802	1,139,710	1,288,000
10 Lands and structures	57,046	11,070	11,000
13 Refunds, awards, and indemnities	418		
15 Taxes and assessments	29,245	37,727	37,000
Subtotal	17,214,500	18,711,766	20,554,775
Deduct charges for quarters and subsistence	49,805	54,766	54,775
Total obligations from appropriated funds	17,164,695	18,657,000	20,500,000
Reimbursements from non-federal sources:			
09 Equipment	2,690	2,690	2,690
Total direct obligations	17,167,385	18,659,690	20,502,690
Obligations Payable Out of Reimbursements From Other Accounts			
01 Personal services	331,153	411,280	411,280
02 Travel	3,410	8,000	8,000
03 Transportation of things		11,000	11,000
05 Rents and utility services		10,000	10,000
07 Other contractual services	8,432	150,000	150,000
08 Supplies and materials	45,888	167,000	167,000
09 Equipment	2,100	131,500	131,500
Total obligations payable out of reimbursements from other accounts	390,983	888,780	888,780
Obligations incurred	17,558,368	19,548,470	21,391,470

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$3,312,136	$3,590,527	$3,447,527
Obligations incurred during the year	17,558,368	19,548,470	21,391,470
	20,870,504	23,138,997	24,838,997
Deduct:			
Reimbursable obligations	393,673	891,470	891,470
Adjustment in obligations of prior years	57,664		
Unliquidated obligations, end of year	3,590,527	3,447,527	3,847,527
Total expenditures	16,828,640	18,800,000	20,100,000
Expenditures are distributed as follows:			
Out of current authorizations	14,155,318	15,800,000	17,200,000
Out of prior authorizations	2,673,322	3,000,000	2,900,000

Mr. FENTON. The first item we will take up is conservation and development of mineral resources.

At this point, we will insert into the record page 6 of the justifications.

(The matter referred to follows:)

Analysis by activities

Activities	Appropriation, 1953	Decreases	Base, 1954	Estimate, 1954	Increases
1. Fuels:					
(a) Coal	$2,109,628	$67,070	$2,042,558	$2,472,558	$430,000
(b) Petroleum and natural gas	1,343,356		1,343,356	1,518,356	175,000
(c) Synthetic liquid fuels	7,630,304		7,630,304	7,905,304	275,000
(d) Helium	90,795		90,795	90,795	
2. Minerals and metals:					
(a) Ferrous metals and alloys	1,793,719		1,793,719	2,366,446	572,727
(b) Nonferrous metals	3,585,125		3,585,125	3,805,675	220,550
(c) Nonmetallic minerals	833,294		833,294	1,019,799	186,505
(d) Mineral research, unclassified	915,854	56,712	859,142	966,142	107,000
3. Control of fires in inactive coal deposits	354,925		354,925	354,925	
Total	18,657,000	123,782	18,533,218	20,500,000	1,966,782

Mr. FENTON. This, of course, is the major part of your appropriation?

Mr. FORBES. Yes, sir.

Mr. FENTON. You are asking for $20,500,000?

Mr. FORBES. That is correct, Mr. Chairman, for the entire appropriation "Conservation and development of mineral resources."

Mr. FENTON. Which is an increase of $1,843,000 over 1953?

Mr. FORBES. That is correct.

FUELS

COAL

Mr. FENTON. Of that total, you are asking for coal $2,472,558.

(The breakdown is as follows:)

Fuels—Coal

Subactivity	Appropriation, 1953	Decreases	Base, 1954	Estimate, 1954	Increases
(1) Sampling, analysis, and fuel economy service:					
(a) Sampling and inspection	$64,409		$64,409	$64,409	
(b) Coal analysis	165,067		165,067	165,067	
(c) Fuel economy service	72,956		72,956	72,956	
(2) Coal mining:					
(a) Estimation of known minable reserves of coking coal	97,970		97,970	97,970	
(b) Development of Alaskan coals	164,472		164,472	164,472	
(c) Coal-mining methods	54,198		54,198	184,198	$130,000
(d) Anthracite field investigations	73,477		73,477	143,477	70,000
(3) Mine flood prevention	167,070	$67,070	100,000	100,000	
(4) Coal preparation and utilization:					
(a) Preparation	108,615		108,615	133,615	25,000
(b) Combustion	122,734		122,734	217,734	95,000
(c) Coke and byproducts	158,110		158,110	203,110	45,000
(d) Subbituminous coal	57,323		57,323	82,323	25,000
(5) Lignite research laboratory	188,562		188,562	188,562	
(6) Anthracite research laboratory	164,047		164,047	204,047	40,000
(7) Coal production and distribution	215,894		215,894	215,894	
(8) Maintenance, buildings and facilities	234,724		234,724	234,724	
Total	2,109,628	67,070	2,042,558	2,472,558	430,000

We would be glad to have a brief summary of what you have done and the reasons for this request.

Mr. FORBES. The $18,553,218 is the base for 1954 for this entire appropriation. I think I am going to ask Dr. McCabe, who is the Chief, Fuels and Explosives Division, to explain the reasons for the increases under "Coal."

Dr. McCABE. Mr. Chairman, referring to page 7, the first increase requested is for coal-mining methods. I think, briefly, I can run through that on the charts and save some time.

Mr. FENTON. Those exhibits are in the justifications, are they not?

Mr. FORBES. Yes, sir, in the justifications.

Dr. McCABE. This figure 1 shows the usual method of mining in which about 50 percent of the coal is recovered. There are variations to that, of course, but generally, this is the area of coal-mining production and these pillars reduce the amount of recovery and there are other wastes in construction. We are recovering about 50 percent under this usual method of mining.

This figure 2 [indicating] shows a method which we have developed in the last year in the fields in West Virginia in which we have used a German mining machine, or a variation of a German mining machine, and we recover the coal completely, going from the entry and driving down at right angles here into the face of the coal and then allowing the area to cave and backfill where it is necessary. With this method we have increased the output per man from something like 10 tons per man-day up to 21 tons per man-day with this type of mining.

There has been a great deal of interest in that. It means we recover 85 to 90 percent of the coal, where, heretofore, we were recovering only 55 to 60 percent.

Mr. FENTON. Under the German mining method you recover all of the coal?

Dr. McCABE. Recovery is about 85 to 90 percent.

Mr. FENTON. You are not leaving much for pillars.

Dr. McCABE. No, sir; you do not leave any pillars.

Mr. FENTON. You take it all out?

Dr. McCABE. Yes, sir.

Mr. FENTON. What holds up the surface?

Mr. McCABE. This happens to be in a mountainous area where the caving does not affect the surface. A little later I will show a chart where we use the backfilling method.

Mr. FENTON. All right.

Dr. McCABE. We are getting into the anthracite region which brings about a request for an increase of $70,000. In pillar mining in the anthracite regions, particularly in the Northern field, where coal pillars are used, and quite often with no backfill, we have the sort of situation, shown in figure 3, develop, where the overlying strata crack and water will flood the mines and so on, even affecting the surface. It gives trouble, of course, with the surface improvements and so on.

Here in figure 3 is a system of backfilling. Again, we have taken a German idea and adapted it to our own uses. Here we make use of the collapsible prop.

Mr. FENTON. How do you backfill?

Dr. McCABE. It is done by a packing machine. Here is the packing machine. That is a pneumatic packing machine that brings in rock and fills in. Here, we have it coming in again and in this case, the back-filling comes in and the collapsible props are knocked down and pulled out.

Mr. FENTON. How do you get that back-filling in there?

Dr. McCABE. That is put in by a pneumatic machine; it is blown in by air.

Mr. FENTON. And it packs in there tight?

Dr. McCABE. Yes sir, it will pack it reasonably tight.

Mr. FENTON. What do you use to hold it in position?

Dr. McCABE. Initially, you have these retaining walls that permit you to pull the pillars and then back-fill the pillar area after your extraction.

Mr. FENTON. In some of the German methods, they use a chicken wire.

Dr. McCABE. Yes, I have seen that.

Mr. FENTON. They use chicken wire. They blow in the fill as fast as they take the coal out and this wire holds it in position. The wire is cheap and it holds it in there all right.

Dr. McCABE. These are, of course, experimental developments and we have been working with materials that we had and it may be that this may work out cheaper to use than chicken wire.

Mr. KIRWAN. That is a good method and a great improvement over what they have done in this Nation in the past 100 years.

When you drive over Minnesota, or many States in the Union, you can see this debris expecially in the lead mines. The rainfall carries it into the Mississippi and we have to have boats and dredges down there that are spending about $20 million a year keeping the Mississippi open, instead of spending a few million dollars up here where the damage starts. Here we are flooding land all over the country and we are spending millions trying to control floods, whereas if they put half of that stuff back in the mines, and all of it should go back that they take out, except the good metal, we wouldn't have this problem.

Dr. McCABE. Yes, sir. Going on with the anthracite. Figure 5 shows the Appalachian pillar method, in which the pillars are left. That means that you have a very hazardous way of working and the recovery is extremely low and losses are high, and in the neighborhood of 50 percent. We are developing in the anthracite region this system [indicating figure 6] and actually, now, we are starting to use one of the anthracite operations of bringing the coal down progressively and recovering it here, without the men having to go up in these areas at all. This means long drilling in some instances and we are developing a 6-inch drill that is able to go up into these areas, without sending men up and actually loading the chute where that is necessary and bringing down the coal in that way. It looks as though this method will get about 90 percent of the coal and it will tremendously increase the output per man, which is really the basic trouble with the anthracite problem. That, briefly, covers that.

We propose in the bituminous field to work in three types of coal. The thick seams, which we started on last year in the Appalachian area, and continue with this German machine, and then we want to go next to rather medium thickness coal in the order of 6 feet or so and develop a system of complete recovery there, or nearly complete. It looks like in 25 years we will be getting in a tight spot on certain types of coal in the East. There has been one prediction that we will even be moving coal from west of the Mississippi to the East.

However, if we can get an entire recovery system developed, it will double our supply. If we can develop profitable methods, the indus-

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When you drive over Minnesota, or many States in the Union, you can see this debris expecially in the lead mines. The rainfall carries it into the Mississippi and we have to have boats and dredges down there that are spending about $20 million a year keeping the Mississippi open, instead of spending a few million dollars up here where the damage starts. Here we are flooding land all over the country and we are spending millions trying to control floods, whereas if they put half of that stuff back in the mines, and all of it should go back that they take out, except the good metal, we wouldn't have this problem.

Dr. McCABE. Yes, sir. Going on with the anthracite. Figure 5 shows the Appalachian pillar method, in which the pillars are left. That means that you have a very hazardous way of working and the recovery is extremely low and losses are high, and in the neighborhood of 50 percent. We are developing in the anthracite region this system [indicating figure 6] and actually, now, we are starting to use one of the anthracite operations of bringing the coal down progressively and recovering it here, without the men having to go up in these areas at all. This means long drilling in some instances and we are developing a 6-inch drill that is able to go up into these areas, without sending men up and actually loading the chute where that is necessary and bringing down the coal in that way. It looks as though this method will get about 90 percent of the coal and it will tremendously increase the output per man, which is really the basic trouble with the anthracite problem. That, briefly, covers that.

We propose in the bituminous field to work in three types of coal. The thick seams, which we started on last year in the Appalachian area, and continue with this German machine, and then we want to go next to rather medium thickness coal in the order of 6 feet or so and develop a system of complete recovery there, or nearly complete. It looks like in 25 years we will be getting in a tight spot on certain types of coal in the East. There has been one prediction that we will even be moving coal from west of the Mississippi to the East.

However, if we can get an entire recovery system developed, it will double our supply. If we can develop profitable methods, the indus-

try will pick them up and carry on with them and they will get higher recoveries. All of this work is done cooperatively and the greater part of the labor is contributed by the industry.

In the West we have a very serious problem, particularly on the public domain, where the coal will run up to 20 feet thick, or thicker, and one of the operators in Utah stated that they were only recovering about 15 percent of the thick bed coal. When you get into this thick bed mining system, you get more coal out, more economically, at the 8-foot height. When you get beyond 8 feet, you get into problems of bringing down the higher coal, but we feel from our experience and as a result of the development of new equipment for the thick seam mine that we can recover the full thickness of the seam.

Those are the 3 methods that are proposed for the bituminous mines, and there is the item of $70,000 for furthering these anthracite methods.

Mr. FENTON. Most of this increase is for experimentation in the bituminous fields?

Dr. MCCABE. There is $130,000 in the bituminous fields of the Appalachians, the Middle West and the Rockies, and $70,000 for the anthracite.

Mr. FENTON. Do you feel that your knowledge gained by the experimentation thus far is not sufficient to use the same amount of money that you have been getting, to extend it to the bituminous fields?

Dr. MCCABE. We have felt that this initial appropriation here for $54,000 was so fruitful, that we feel now we have the beginning of getting the method of high recovery established. As a result of that first year's work with the operators, there are now five of these German machines on order for the Appalachian fields and we have other requests for help all through the northern Appalachian area generally, and we will be able to show these people how to use these things.

Mr. FENTON. Is there much subsidence in areas other than the anthracite areas?

Dr. MCCABE. Of course, you have it in the mountainous areas of West Virginia, but where there are not any surface improvements, there is no objection to it.

Mr. FORBES. I think it is variable. You get it in western Pennsylvania. In some localities subsidence is pretty extensive, while in others we have not had too much trouble from it.

In the Pennsylvania bituminous region, in the Greensburg and Connellsville districts subsidence is common, but you do not have it too much in other localities. In Illinois they only get about 45 to 50 percent of the coal. The farm land there probably is more valuable than the coal, and the coal operations just have to suffer a loss.

Mr. MCCABE. In Illinois, particularly, the law is very rigid in that regard.

Mr. FENTON. Has this experimental work shown any results in decreasing subsidence?

Mr. MCCABE. We have only been in this big field, in anthracite, but we intend to extend that into other areas.

Mr. FORBES. Where is the anthracite field?

Mr. MCCABE. I think it is in the Southern fields, I cannot tell you the names of the companies.

Mr. FORBES. Is not that one of the Philadelphia and Reading properties?

Mr. FENTON. Then you think this is necessary to expand it?

Mr. MCCABE. Yes, I think so, Dr. Fenton. It is difficult to estimate how fast this should go and when we ought to be able to terminate it. I would think if we had 3 or 4 years of this then we could begin to taper off, and then on the thin-seam mining we can begin to taper off next year. Now, the work in the thick-seam coal is going to be a difficult job, and it is going to take a little longer to complete that, but no part of it should go beyond 5 years.

ANTHRACITE FIELD INVESTIGATIONS

Mr. FENTON. Now, under "Anthracite field investigations," you have an increase of $70,000. What is that?

Mr. MCCABE. That was illustrated by the charts here for pitching seams, and for flat seams, and where we hope to backfill those in and then mine the seams, and to use the caving system such as shown on the charts.

Mr. FENTON. Is that a similar item to your $130,000?

Mr. MCCABE. That is right.

Mr. FENTON. As I understand it, the $130,000 increase in coal-mining methods is for the bituminous area?

Mr. MCCABE. Yes, sir.

Mr. FENTON. And the $70,000 increase is for the anthracite area?

Mr. MCCABE. That is right, Dr. Fenton.

Mr. FENTON. For practically the same investigation?

Mr. MCCABE. Yes, sir.

MINE FLOOD PROTECTION

Mr. FENTON. Now, what about our mine flood protection? You are asking for $100,000 this year. There is no increase over 1953.

Mr. WESTFIELD. Yes.

Mr. FENTON. I understand the Director to say this will complete the survey?

Mr. FORBES. That is correct, Dr. Fenton.

Mr. MCCABE. There is actually a reduction there of $67,000.

Mr. FORBES. An overall reduction of $67,000.

Mr. FENTON. That is right.

Mr. FORBES. It is not my intention to come back and ask Congress for any further money. This should complete it.

Mr. FENTON. I agree with you. It has been going on 5 years, has it not?

Mr. FORBES. Yes, sir, and it was anticipated that 3 years would finish it. You make an estimate of 3 years, and then you run into some difficult problems along the way, and you have to follow them through.

Mr. FENTON. That was a very, very important survey, as I view it, and I had some responsibility for inaugurating it. Now, what we are anxious to know is what the answer is.

Mr. FORBES. That is right, Dr. Fenton.

Mr. FENTON. How soon can we expect an answer?

Mr. FORBES. Within the next year or year and a half we ought to be able to get an answer on it. Of course, they know the partial an-

swer now, Dr. Fenton, with the large tunnels and the central pumping plants.

Mr. FENTON. We knew that before the survey, for that matter.

Mr. FORBES. Yes, sir.

Mr. FENTON. But we thought that you would come up with some new ideas here as to what could be done about it. We wanted to get all the facts in the matter; and I think Congress is entitled to get an answer as soon as possible so that if any remedial measures are effected we can go to work on them.

Mr. FORBES. That is right.

Mr. FENTON. I do not want to see any more men drown like rats in a trap, you know.

Mr. FORBES. That is right, and we certainly do not either.

Mr. WESTFIELD. The complete report is being compiled and should be published before July of 1954.

Some of the publications are already published on certain phases of the problem. The barrier-pillar studies have been completed for the Western, Middle, and Southern fields. Half of the study on barrier pillars has been completed for the Northern field. The studies on proposed tunnels and central pumping plants should be completed by July of next year.

Mr. FENTON. I am glad to hear that.

PREPARATION

Now, we come to coal preparation and utilization. In preparation you are asking for an increase of $25,000. What about that item?

Mr. MCCABE. Dr. Fenton, you know what we have been doing in this coke and coal survey, and along with that we have been studying the preparation characteristics of these coals. We are expanding that survey, and we would like to make a survey regarding the preparation to keep up with the mapping of the mine and coking coal reserves.

The preparation work does not go as fast, and we find ourselves considerably behind with the preparation work, and also with the carbonization phases of this work, and we are going into Tennessee and Alabama next year, if we have the funds with which to do the work, to work on the washability characteristics of those coals and also on the carbonizing and blending characteristics of those coals.

COMBUSTION

Mr. FENTON. What about this increase of $95,000 for combustion?

Mr. MCCABE. Part of that is for the study of slagging characteristics, and the deposit characteristics which show in boilers and furnaces, and that sort of thing. That particularly comes along with the development of high-pressure boilers. The greatest part of that is for completing the study of the fundamentals and the gasification qualities of the Washington coals and the production of a high B. t. u. gas from the lower heating value gas obtained in the primary gasification stage. We have gotten that far along on the catalyst work, and we want now to get a pilot plant unit to make this 900 B. t. u. gas from the Washington coals. We will finish that next year.

COKE AND BYPRODUCTS

Mr. FENTON. Now we come to this very important item, an increase of $45,000 for coke and byproducts. How are we getting along with that work?

Mr. MCCABE. In recent years, Dr. Fenton, the quality of the low-temperature carbons is beginning to come back into interest. We have not done much on the character of low-temperature tars from coking low-temperature carbons. We would like to do a considerable amount of work on that because it has different types of chemicals in it than the high-temperature tars, so we would like to initiate some research in that field, as well as continuing to expand the blending work on the coals themselves.

Mr. FORBES. Off the record.

(Discussion off the record.)

Mr. MCCABE. Dr. Fenton, you have heard of the Parry gasification process. This is a photograph showing that [indicating].

Mr. FENTON. Before we go any further, Mr. Director, referring to those small increases that you have been asking for, have any of them been affected by revisions of the budget?

Mr. FORBES. No; but I am inclined to think we should consolidate these things a little more and just hit the highspots on them. We thought it would be helpful to the committee to justify each one of these small projects.

Mr. FENTON. I am very glad to get this information.

Mr. FORBES. You looked it over, then?

Mr. FENTON. What I am asking now is whether or not any of those have been deleted by your reevaluation of the whole budget?

Mr. FORBES. You have asked me a question, Dr. Fenton, and I will say no; they have not. You have asked the question, Doctor, and I cannot answer it otherwise. That is correct.

Mr. MCCABE. That is right.

Mr. FORBES. They have not, and I might, in addition to that say that all of the increases that we have in our budget have been O. K.'d. Let me modify that statement to some extent, Dr. Fenton, by saying that the Department has O. K.'d them, and they are now under consideration by the Bureau of the Budget. I do not believe there has been a report back from the Bureau of the Budget to the Department yet.

PRESENT STATUS OF COKING COAL

Mr. FENTON. Referring to this particular item that we are talking about, coke and byproducts, what is the present status of coking coal?

Mr. MCCABE. The quality of coking coal is generally continuing to be inferior, and just little by little over the years the steel industry keeps taking higher sulfur content, and somewhat higher ash-content coal, and the tendency is to do more and more blending of the coal to try to get the kind of coking characteristics they want. As the premium coking coal begins to be scarcer and scarcer the tendency is to try blends of various kinds.

Mr. FENTON. You have made a survey of the various bituminous regions to find out what good coking coal is left.

Mr. MCCABE. Yes, sir.

Mr. FENTON. That was done in Pennsylvania and West Virginia, I believe?

Mr. MCCABE. We have about finished Pennsylvania, and we are working in West Virginia at the present time, and moving on south in the Appalachian area. I think we have reported on 13 counties. We can usually do 6 or 7 counties a year by units.

Mr. FENTON. What is the answer as far as Pennsylvania and West Virginia are concerned?

Mr. MCCABE. We are finding considerable coking coal, but the reserves are much less than the original survey showed.

Mr. FENTON. And you are doing a lot of research work in blending?

Mr. MCCABE. Yes, sir, Dr. Fenton, we are doing a lot of research in blending, trying to get better combinations of some of the lower quality coals with the higher quality coals.

Mr. FENTON. Has anything been done by your people, as far as blending it with a certain percentage of anthracite coal is concerned?

Mr. MCCABE. Yes, sir, we worked on that during the war years. The Ford Motor Co. was the biggest user of it, and they continue to do that, and we are encouraging the expansion of that work wherever we can do so.

One of the things that we are trying to get started now is the use of anthracite, particularly large-sized anthracite, in blast furnace operations. Yesterday we had a meeting on that with some of our anthracite people and our own people. We are trying to work out with the Fairless Works an agreement with them to try to get them to use lump anthracite in their operations. We feel that they will get by with that cheaper than they could with coke.

Mr. FENTON. I think from an economic point of view, as far as the economy of the anthracite area is concerned, if just a small percentage of anthracite were used it would certainly be a help to the area.

Mr. MCCABE. That is right.

MANGANESE RECOVERY FROM SLAG

I am sure you are aware of the operation which is going on for the recovery of manganese from slag.

Mr. FORBES. That is set up near Wilkes-Barre.

Mr. MCCABE. Yes.

Mr. FORBES. I think it would be well to elaborate on that.

Mr. MCCABE. The Bureau pioneered that process for the recovery of manganese from slag. We came to the fuel problem, and with the coke capacity being as limited as it is we did not see where we were going to get the necessary coke production for the production of manganese.

The first tests, which were made at Pittsburgh, were not too encouraging, but now a private corporation has taken it over, and they are able to go ahead and develop that process for the manganese slag operation.

Mr. FORBES. What is that man's name, Sid Richardson?

Mr. MCCABE. Yes, Sid Richardson, who is an oil operator. He got a development loan of $1,500,000 on it, and I think he is putting in $2 or $3 million of his own to further that development.

Mr. FENTON. All right, sir.

Mr. FORBES. Dr. Fenton, will you permit me to have Dr. McCabe tell about this Parry process? I know you people would be interested in it.

Mr. MCCABE. I can do that very briefly.

Beginning back as long as 10 years ago, Mr. Parry started to work on this process.

All it is, is merely bubbling in gas through all of the fuels or particles in it, and it bubbles or boils.

Using that process he has now gasified a number of these lignite coals or subbituminous coals, and he makes his gas and tar in it, and then he has char also in the process. Now, that is done at about 900° F., which is called low-temperature carbonization. Gas is used in the process of heating.

The tars which result from that will go to chemical use and the char will go for the purpose of power generation.

The Texas Power & Light Co. got interested in it 2 or 3 years ago, and they entered into a cooperative agreement with the Bureau of Mines providing for supplying something like $40,000 or $50,000 a year, which just about matched what Congress had given us.

Now that process is being installed in an industrial-sized plant in Texas, which is located right in the heart of the gas country.

This plant is an 8,000-tons-a-day plant. There are 8 units, each of them turning out 1,000 tons. The Parry operations have not put on all units. One carbonizer has been put on, and some of the larger companies' forces are working on the development of chemicals from the tar which results from the process. Ultimately that might be the approach to the synthetic-fuel industry. I think we could get gasoline from that source. Within a year we will know pretty well how cheaply we are getting power down there, and what we can do with those chemicals.

Mr. FENTON. If you want to enlarge on that, you have permission to extend your remarks, Mr. McCabe.

Mr. FORBES. Mr. Chairman, in Texas and elsewhere are lignites containing 35 to 36 percent moisture. We started experimentation on them and drove off the moisture and created a char and took off in the neighborhood of about 14 gallons of tar products per ton.

Mr. MCCABE. That is right.

Mr. FORBES. And they are using this char to furnish energy for one of the largest aluminum plants in the Texas field.

Mr. FENTON. Is this mainly lignite that this operation uses?

Mr. MCCABE. Yes, sir. As a result of this development in Texas we are deluged with requests from everybody over the country wanting us to work on their particular coal. We would like to have this additional amount of funds to do this test work in other areas. Little routine tests, costing $60 or so, will give them the basic information. Different coals yield differently, and they will go all of the way from 5 gallons of tar a ton in North Dakota to 45 gallons of tar a ton in the Appalachian area.

Mr. FENTON. What is that difference?

Mr. MCCABE. From 5 to 45 gallons per ton from lignite and the bituminous coal.

ANTHRACITE RESEARCH LABORATORY

Mr. FENTON. Now, we come down to item 6, the Anthracite Research Laboratory. There is an increase there of $40,000.

The appropriation for 1953 for the laboratory in Schuylkill Haven was $164,000. There had actually been allotted by you people $139,614 in November.

The reduction represents a 15-percent cut for administration in either Pittsburgh or Washington, or both.

In the 1952 hearings we were advised that only about 1½ percent would be withheld for administration. Why this discrepancy or difference between 15 percent and 1½ percent?

Mr. FORBES. Mr. Rice.

Mr. RICE. The Bureau prepared some figures on that to show where that money went, and I think we gave you a copy of it a few weeks ago, Dr. Fenton. I do not have a copy here, but I can put it in the record.

It is 1½ percent at Pittsburgh. The other amount is for other costs in connection with the laboratory in the office of the Chief of the Division here, in the office of the Chief of the Coal Branch, for their printing and publication costs.

Mr. MCCABE. Those figures do not include the anthracite statistics which are done here in Washington, do they?

Mr. RICE. No; those statistics do not come out of this particular money.

Mr. MCCABE. No; that is right.

Mr. RICE. This is for the laboratory.

Mr. FORBES. How about having a statement inserted in the record on that, bringing it up to date?

Mr. FENTON. I think we had better do that.

Mr. RICE. We have a statement all right, but I did not bring it along with me.

Mr. FENTON. I want to repeat what I said at that time: that, when we appropriate a certain amount of money for any project, I do not know why 5 to 15 percent of it should go for something else. It is either that or we are not getting a proper estimate of what is required.

Mr. RICE. Well, it is going into the cost of operating the laboratory. You understand that we have Dr. McCabe and Dr. Brown supervising from here the general work of the laboratories. We are performing certain services for the laboratories at Pittsburgh, and we are printing their reports out of the money that is allotted here, and that is where those costs are. They are directly related to the laboratory, however.

Mr. FENTON. I do not recall ever having had a breakdown of the amount of money allocated for any project.

Mr. RICE. We do have it.

Mr. FORBES. We have them, and we shall be glad to put them in the record.

Mr. FENTON. Why, I ask, then, bringing it very bluntly to the point, are not the various expenses for publishing papers and records and so forth not put in your administrative expenses?

Mr. RICE. That could be done. However, the administrative-expense item is sort of the central core of the Bureau. It is the basic administration, a thing that does not change much with the expansion or diminishing of activities. It is what is necessary just to keep our facilities going; whereas these expenses, such as the printing of reports,

for example, fluctuate widely, as we have always considered them to be essential parts of the projects themselves.

Mr. FENTON. In the basic act for the laboratory how much money was supposed to be allocated for annual expenditures for the laboratory, about $175,000?

Mr. RICE. Yes, $175,000.

Mr. MCCABE. Yes, sir, $175,000.

Mr. FENTON. All right, I do not know that we can do much about that right now, but I would like to have an explanation of that variation.

Mr. FORBES. We will do that, Dr. Fenton.

Mr. FENTON. And the reduction of this money to go to the laboratory.

Mr. FORBES. Yes, sir.

(The matter referred to follows:)

Allotment of anthracite research laboratory funds, fiscal year 1953

Allotment to Schuylkill Haven	$139,614
Allotment to regional office (Pittsburgh)	2,002
Allotment for technical programing and general services (Washington)	22,431
Total amount appropriated	164,047

Mr. FENTON. Now, what progress has been made by industry representatives in getting research programs formulated at Schuylkill Haven?

Mr. MCCABE. A little over a year ago we activated a Technical Research Committee in anthracite, and I think that has been a great help, Dr. Fenton, because it does bring the industrial viewpoint in, and it has actually brought us a great deal more assistance on the job by the industry itself, and I think our relationships, for one thing, have improved very greatly in the region as a result, and I think they respond, and we certainly respond quicker too to what the demands of the industry are by operating that way.

Mr. FENTON. I know it is rather early, and the laboratory has not been functioning very long, but what accomplishments have been achieved up to date?

Mr. MCCABE. Primarily in the mining side. I would say we have gone further along in that because we started in that field. To see that these mines use good mining methods, and so forth.

Part of our handicap in the laboratory has been, of course, the inability, or, rather, the lack of enough funds to staff it fully, and that is, of course, why we ask for an additional $40,000. Particularly in the preparation and utilization of anthracite we are understaffed. On the matter of the preparation of coal there are several projects we would be working on if we had two or more engineers to put on the job. The same thing goes for the utilization of anthracite.

Mr. FENTON. About the only experimentation you have done, then, is on mining?

Mr. MCCABE. We have been doing some work in the field of laundering, but mining is far ahead of the other projects because it started before the laboratory was built.

Mr. FENTON. You have not gotten up to the point of finding byproducts yet?

Mr. MCCABE. No; but we are looking at the possibility of getting germanium from anthracite. Some of the coals in the United States

contain one-hundredth of 1 percent of germanium, which sells for $340 a pound. One of the things that we are looking for is germanium in coal ashes from big powerplants that burn anthracite or burn bituminous.

Mr. FENTON. That is about all the increases you have asked for. I want to compliment you on the decrease.

Mr. FORBES. I want to say this in connection with the anthracite laboratory and, of course, this is my bailiwick too. I attended a couple of those meetings, and I was very much impressed by the great interest taken by the operators, the State Department of Mines of Pennsylvania, and the United Mine Workers of America in getting together there with our technologists and trying to work out these problems, and I do not think that there is any fat here, I think they are technical things that will help the economy of the region.

Mr. FENTON. Well, you know people are looking toward that, Dr. Forbes.

Mr. FORBES. Yes, I know they are.

Mr. FENTON. They will begin to ask questions as to what is the laboratory doing.

Mr. FORBES. You are right, and they should be asked.

Mr. FENTON. Yes.

Mr. MCCABE. Yes, sir.

SYNTHETIC LIQUID FUEL PROGRAM

Mr. BUDGE. Dr. Forbes, I have read your justification relative to the synthetic liquid fuels program. I know that program has been running between $7 million and $8 million a year. My understanding is that those processes are fairly well established both for coal and for oil shale. How far away are you now from having a process which is commercially competitive?

Mr. FORBES. I am just wondering, Mr. Budge, in view of the statement which Dr. Fenton inserted in the record, if you want to go into that further——

Mr. BUDGE. I notice the amount has been reduced in the revised budget estimate. It is down to $5,905,000.

Mr. FORBES. I think the fundamental research that we are doing is the largest amount and that we should continue with it.

We have to learn a whole lot more about gasification under atmospheric conditions and under pressure. I think it is very, very essential. By the way, at Louisiana, Mo., we have quite an investment, about $30 million, is it not?

Mr. MCCABE. Something on that order, $20 million to $25 million.

Mr. BUDGE. How far away are you now from being commercially competitive?

Mr. MCCABE. It is hard to say. I would say, as far as hydrogenation is concerned I would not be able to answer that definitely. I do not think anybody can answer it.

Mr. BUDGE. I was particularly interested in your remarks a few moments ago, and I certainly agree with them that it is the function of the Bureau to do the research.

Mr. MCCABE. That is right.

Mr. BUDGE. And then, I think you said, let industry take over and develop it?

Mr. McCabe. I still feel that way, Mr. Budge.

Mr. Budge. At what point are you going to reach your conclusion here and let industry take over and develop it in this program?

Mr. Forbes. What would you say on that?

Mr. McCabe. Maybe this might throw a little bit more light on that with regard to oil shale. Industry and the Bureau are very close together on what they figure it will cost to make gasoline. Now we are within a cent of each other. Industry has indicated in a recent report 2 weeks ago that gasoline can be made at 14.9 cents a gallon at the refinery.

Mr. Budge. How does that compare with the petroleum product?

Mr. McCabe. From petroleum it will run 12 or 13 cents a gallon.

Mr. Budge. You are within a couple of cents, then?

Mr. McCabe. Yes; we are within a couple of cents on oil shale; I mean oil from oil shale.

Now, we do have a big retort at Rifle, Colo., and that should be run for some time to see just what improvements in the economy we can accomplish there.

I think we will come to a point before too long where we can begin to phase out the big operation at Rifle. I do not think that it will be too long before the west coast petroleum industry will pick up the oil shale. They have been in to see the Secretary of the Interior talking about additional acreage on the public domain, asking him to give them a 20-year period to stay. Under the present rules the area would be too small.

Mr. Budge. It seems to me that the Bureau has very successfully and very ably pointed the way for industry here.

Mr. Forbes. That is right.

Mr. Budge. And when you reach the point where you are within 2 cents of being competitive I just wonder if we have not just about reached the point where industry should take over.

Mr. McCabe. I think that is essentially what we are trying to do in this instance.

MANGANESE FROM SLAG

Mr. Kirwan. What method or system are you using in extracting manganese from slag?

Mr. Forbes. Will you take that, Mr. Zinner?

Mr. Zinner. We have an illustration here that I think will answer your question. Starting with the open-hearth slag containing roughly 25 percent iron, 10 percent manganese, 1.3 percent phosphorus, 22 percent silica, and so forth; and taking that through the blast furnace operation to produce a specular iron composed of 70 percent iron, 20 percent manganese, and 4 percent phosphorus; it shows that, through a series of steps, we can produce ferromanganese containing 80 percent manganese with byproduct iron made up of 95 percent iron and 4 percent phosphorus. The later product can go into steel production. I think you will be interested in the exhibit, Mr. Kirwan.

Mr. Kirwan. The Government built a blast furnace at Pittsburgh, did it not?

Mr. Forbes. Just a small pilot plant.

Mr. Kirwan. Yes.

Mr. Zinner. It is illustrated on that chart.

Mr. Kirwan. How is the work at the pilot plant coming along?

Mr. ZINNER. It is working out very well; not only in this particular project but we find a number of uses for it in other operations in the ferro-alloy field. We feel that, as far as the Government is concerned, the scale of operation was adequate to permit a satisfactory demonstration of the slag process.

Mr. KIRWAN. You have some others who have been interested in this kind of operation out at Youngstown?

Mr. ZINNER. From slag?

Mr. KIRWAN. Yes; one from Cleveland and also another one or two.

Mr. ZINNER. I am not acquainted with that, Mr. Kirwan; but I have heard of a number of others. It is a matter of technique in the use of converters as part of the slag-treatment process.

We found that one of the things to overcome in demonstrating the process was the high consumption of coke; and, as Dr. McCabe pointed out, we should continue to be working on this fuel problem, on the techniques of making manganese with other fuels through this process.

Mr. KIRWAN. There are a number working on this process?

Mr. FORBES. Yes.

Mr. KIRWAN. At the pilot-plant stage?

Mr. FORBES. That is right.

Mr. KIRWAN. It may be a little expensive, but in the event we should have an emergency we have got to make use of every available source of manganese. And certainly it is not nearly so expensive as it would be to have to pay some foreign nation.

Mr. ZINNER. We feel that this is a very significant development.

Mr. KIRWAN. I am glad to hear that.

Mr. FORBES. It is really an accomplishment.

Mr. KIRWAN. Yes. The manganese comes out, and through this process the waste is put out on the side.

Mr. FORBES. That is right.

Mr. ZINNER. I think that is a pretty good illustration of what Mr. Budge was referring to here. There is a point, after you have demonstrated technology satisfactorily to industry, where industry will take up the idea, even though there may be some economic features still lacking. We have been approaching that certain point.

PETROLEUM AND NATURAL GAS

Mr. FENTON. We will insert in the record at this point the tabulation appearing on page 21 of the justification entitled "Petroleum and Natural Gas."

(The matter referred to is as follows:)

Petroleum and natural gas

Subactivity	Appropriation, 1953	Decreases	Base, 1954	Estimate, 1954	Increases
(1) Primary production	$283,690		$283,690	$318,690	$35,000
(2) Secondary recovery	432,214		432,214	572,214	140,000
(3) Transportation and storage	10,245		10,245	10,245	
(4) Chemistry and refining	233,423		233,423	233,423	
(5) Thermodynamics	84,700		84,700	84,700	
(6) Petroleum economics	179,406		179,406	179,406	
(7) Maintenance, buildings, and facilities	119,678		119,678	119,678	
Total	1,343,356		1,343,356	1,518,356	175,000

Mr. FENTON. That brings us up to the new subhead, "Petroleum and Natural Gas." Who will discuss that?

Mr. MCCABE. The first item in which there is any increase is in primary production. The increase there is desired to extend the effort, in the determination of methods and spacing to get the maximum production and the most economical production from wells, from the oilfields. This depends upon the kind of production, whether it is limestone or sandstone, and the yield.

This kind of information is particularly valuable for the enforcement agencies of the States, particularly with reference to advising on the spacing, what spacing is appropriate for the particular field.

You see, the North Dakota field is now opening up, in the Williston Basin, and that is the first field where we have had the opportunity to get in on the preliminary work just when the field was beginning. So, we feel this offers a great opportunity of learning more on how to get more oil out of the ground during the first harvesting of it.

SECONDARY RECOVERY

Mr. FENTON. What about your secondary recovery?

Mr. MCCABE. The secondary recovery includes the water flooding and the reintroduction of natural gas into the strata to increase recovery, but primarily we are interested in doing this, in a rather extensive way, to see what can be done through the best use of explosives; that is, to get the maximum use out of explosives in various kinds of strata. In shooting the oil and gas wells, we may overshoot, or we may undershoot, without developing a network of fractures in the oil- and gas-bearing rocks. So what we hope to do is to put this matter of shooting on a scientific basis in order to get the maximum yield. We are doing that by determining the flow to the well before it is shot and after it is shot, and ascertaining the effect of the breakage on the production.

Mr. FENTON. The increase requested in the two items is a total of $175,000, for primary production and secondary recovery. There is no increase provided for new additional reserves of oil; it is merely to speed up something that has been done.

Mr. MCCABE. Without this increase we would not be able to do anything in these new areas, new fields like the Williston Basin. It is a matter of shooting at certain levels now. We feel, however, that we should develop as much information as we can in order to multiply the recovery that can be had from oil fields.

Mr. FENTON. Of course, private industry is doing considerable research in this field.

Mr. MCCABE. Yes, Dr. Fenton. I have only been in the Bureau myself 5 or 6 years, and I am very much impressed with the modest appropriation in the petroleum field, because of the size of the industry. Of course, that results partly from the fact that the industry does more work itself. But in the technical field, technically, their work is not adequate, particularly in this matter of spacing, so far as the small operator is concerned. Naturally, his interest is in getting all the oil out of the field he can and to do so he may want more wells in production than would be economically advisable. Instead of spacing the wells on 20 acres, or 80 acres, he may want to decrease it down to 20 acres.

The industry itself has many different opinions as to what is proper spacing.

When we come to the other item that you might anticipate, there might be research for that type by the bigger companies, but the little independent oil operator is just not set up to do that work.

Mr. FENTON. About how much oil has been recovered under the secondary recovery program in 1952?

Mr. MCCABE. I am not sure whether that figure is here or not—I believe it is somewhere, but I would like to read this statement into the record:

> By the older production method wells often flowed initially with inefficient utilization of the gas and usually recovered only 10 to 25 percent of the oil originally in the underground deposit.

We are now getting as high as 60 and 65 percent recovery in some of the best operated fields, where the average is from 40 to 50 percent.

Our whole idea is essentially that of supplying additional information and technical information to get the production up to approximately 60 or 65 percent range.

As to the answer to the amount that we have recovered, it has been a tremendous amount, running into the millions of barrels.

Mr. FORBES. We can secure that.

Mr. MCCABE. Yes; I can insert those figures in the record.

(The information requested follows:)

It is impossible to determine just how much oil is produced by secondary-recovery methods, because primary production and secondary recovery merge and overlap, so a sharp dividing line cannot be drawn between them, and because oil from these two types of operation ordinarily is not accounted for separately. Estimates indicate that about 1.3 billion barrels of oil has been produced by secondary methods, and that such methods now account for about 150 million barrels a year.

The reserves that can be recovered by secondary methods in the future are more important. An estimate of recoverable reserves in stripper-well oil fields, based on a comprehensive survey, gave 4,235 million barrels recoverable by primary production, and 4,578 million barrels recoverable by secondary methods, as of January 1, 1951. Thus, the prospective recovery from these fields by secondary methods exceeded that by primary methods. As all oil fields will eventually reach the stripper-well stage, the ultimate recovery by secondary methods is much greater than the 4,578 million barrels estimated for the fields that had reached stripper-well stage by January 1951.

One of the leading petroleum engineers of the Nation estimated secondary-recovery reserves in the United States at 7,156.7 barrels, as of December 31, 1947, and he ventured the guess that the physically recoverable secondary oil reserves of the United States might be twice that much.

The oil fields that have been discovered in the Nation probably contain more than 100 billion barrels of oil, but so much of it is "locked in the sands," beyond

recovery by present methods, that the estimate of our proved recoverable reserves of crude oil and natural-gas liquids was only 33 billion barrels as of December 31, 1952. Recovery of the "unrecoverable" oil, so important to the future of the Nation, by improved secondary methods, or by tertiary methods, presents a real challenge and justifies expansion of petroleum-engineering research by Government and industry.

THERMODYNAMICS

Mr. FENTON. Of course private industry is also doing research work in thermodynamics, similar to the Bureau's research program?

Mr. MCCABE. Yes, the industry does research on thermodynamics, but not of the type the Bureau is doing. The Bureau's research is primarily to get basic data, and the program is for the purpose of obtaining accurate values of the thermodynamic properties of hydrocarbons and related substances found in petroleum and of the chemical compounds, which may be manufactured, using petroleum products as raw materials.

It is the most fundamental type of research, but I think it is tremendously valuable in developing a new industry, new types of refinery equipment, which means larger production. Of course, the larger operators have much information, but they are continually looking to the Bureau for basic thermodynamic data. The independent operator does not have the information, except from the Bureau.

Mr. BUDGE. I have just been wondering, as I have gone through the two tabulations on page 7 and page 21 of the justification, especially for the items for mining and flood prevention, and other items in which you have requested increases. There were increases in 1953 also. With particular reference, Dr. McCabe, to your justification for petroleum and natural gas, why should these programs have remained static, with the exception of the two items indicated?

Mr. MCCABE. Actually, in the petroleum work, the biggest need now is for increased emphasis on primary production and secondary recovery.

The work on chemistry and refining is a matter of determining the properties of petroleum and its products, which is of benefit to the public, the consumer, as well as to other industries. Part of it is what we might call a service operation, or benefit, in getting up the information, but it includes highly important research that leads to more and better products from the oil produced.

The same is true with petroleum economics; it is for the production of petroleum statistics in the United States, and this is the only Federal source of that kind of information.

Mr. BUDGE. I do not know that this page in the justification is unique for this particular agency, but it seems to me that they come in with a request each year for two or three increases, and then maybe come back the next year and want increases in two or three other items. I am just wondering if a real examination has been made to see if some of these things cannot be cut down, now that we have learned a lot more about them.

Mr. MCCABE. As far as petroleum is concerned, especially, I know there is necessity for a lot of research work, research data and technical information, and to that extent we are performing a service in the collection of these data.

Mr. BUDGE. The same thing would not apply in your justification on page 6, in the research program, which apparently has had quite an expansion.

(Off-record discussion.)

SYNTHETIC LIQUID FUELS

Mr. FENTON. We will take up the next activity, synthetic liquid fuels, and we will insert in the record at this point page 27 of the justification.

(The statement referred to follows:)

Synthetic liquid fuels

Subactivity	Appropriation, 1953	Decreases	Base, 1954	Estimate, 1954	Increases
1. Coal-to-oil research:					
(*a*) Hydrogenation	$667,600		$667,600	$767,600	$100,000
(*b*) Gas synthesis	667,600		667,600	667,600	
2. Gasification:					
(*a*) Research in gas production	750,000		750,000	850,000	100,000
(*b*) Underground gasification	135,400		135,400	135,400	
3. Coal-to-oil demonstration plants:					
(*a*) Hydrogenation	1,655,800		1,655,800	1,655,800	
(*b*) Gas synthesis	1,440,000		1,440,000	1,440,000	
4. Oil shale:					
(*a*) Mining	143,000		143,000	218,000	75,000
(*b*) Research	476,800		476,800	476,800	
(*c*) Demonstration	1,249,104		1,249,104	1,249,104	
5. Excess power production	445,000		445,000	445,000	
Total	7,630,304		7,630,304	7,905,304	275,000

Mr. FENTON. You are requesting for synthetic liquid fuels, $7,905,304. It is understood, as I mentioned in the beginning, that the revised budget estimate submitted to the Bureau of the Budget reduces this estimate by $2 million, to a figure of $5,905,304. How will those reductions be applied?

Mr. MCCABE. Dr. Fenton, of course, we have the report back from the Bureau of the Budget, and the Secretary has indicated, has made a request, and there has been a recommendation to the Bureau of the Budget by the Secretary that item 3 on page 27, hydrogenation and gas synthesis program, be reduced in the amount of $2 million.

Mr. FENTON. Which would leave you about $1 million?

Mr. MCCABE. Yes; that is right. The reason for that is that in the coal-hydrogenation plant, I think we have made about 14 to 15 complete runs, trainloads of coal, so it is felt that at this stage, with this particular process, that we could recess the operations at the beginning of the fiscal year 1954. And then in the gas synthesis, where we have the results only on atmospheric-pressure gasification, which has been gained through the second run, we would like to go into 1954, fiscal year 1954, with more runs.

Mr. FENTON. That is where the $2 million is taken from?

Mr. MCCABE. Yes.

Mr. FENTON. Out of hydrogenation and gas synthesis?

Mr. MCCABE. Yes.

Mr. FENTON. Nothing out of any other item?

Mr. MCCABE. No; that is right. Then there is another area, the matter of power generation in which the Congress appropriated an amount of money, but at the plant they are selling a certain amount of power, but that money goes back into the reserve fund. It is contemplated that this plant would be leased for operation by a private company, that is, the powerplant.

Mr. FENTON. I am correct in saying some 2 years ago that something might happen in this item, to put the Federal Government into the power business.

Mr. FORBES. I think we started off with the REA administration to some extent, Dr. Fenton, supplying power to the REA administration.

Mr. FENTON. I know, that was the excess power that was being marketed.

Mr. FORBES. At Louisiana, Mo., yes.

Mr. FENTON. Where they had more power than they needed.

Mr. FORBES. Yes.

Mr. FENTON. Now, what is going to happen to the plant?

Mr. FORBES. We have to turn it back.

Mr. MCCABE. I think that the proper procedure would be to lease it to some power company, because we only need power in our operations for about 6 months out of the year, and the amount of power that we will need will be minor in comparison to the other part of the plant, and we would be able to purchase power.

Mr. FENTON. Do you sell power, or would you sell power?

Mr. MCCABE. I am sure, Dr. Fenton, that the sale of power was to the REA. A private operator could turn that out.

Mr. FENTON. You are planning now to get rid of that powerplant?

Mr. MCCABE. Yes.

Mr. FENTON. Then where will you get your power?

Mr. MCCABE. We would buy power from them.

We will have minor use of power after we get that plant in standby condition, during 6 months, and in that period we could buy the power that we need from them.

Mr. FENTON. You would have to have authority to sell that plant, would you not?

Mr. FORBES. I do not think that we will need authorization to contract it out, will we? That has been done, as I recall.

Mr. MCCABE. We are coming up, Mr. Chairman, with a one-step operation, instead of the two-step process. We have developed at Bruceton, through basic research, one-step gasification in the synthetic fuel process. We are making about half the coal go into gasoline, and 80 percent of that high octane gasoline, and the other half will be primarily methane. Those are two things we need badly, and need on a national scale.

So what we would like to do is to put the plant at Louisiana on a standby basis, and let it stay there until such time as the new process would come in on a bigger scale.

Mr. FORBES. In other words, put the hydrogenation plant in mothballs and see that it is properly maintained for some time in the future. That is the idea.

Mr. MCCABE. Yes.

Mr. FORBES. Now there is about $5 million invested in that gas-synthesis building and plant.

Mr. MCCABE. Yes.

Mr. FORBES. They have only started, and have made the first runs, to get some basic information.

Mr. McCabe. You see, Dr. Fenton, all of this has been basic research; we now have developed 5 or 6 of these pilot plants.

We have got this to the one-step gasification, and the gasoline production for the hydrogenation from coal, now in the laboratory. We have at Morgantown, W. Va., a plant where we can bring the pressure up to 450 pounds per square inch, which makes it much more economical and much better than the pressure we are now operating under.

Mr. Fenton. What is the value of the power plant you have been operating?

Mr. McCabe. I will have to supply that,

Mr. Fenton. Will you supply that for the record?

Mr. McCabe. Yes; I will get the output and the estimated value of it.

Mr. Forbes. It certainly is a fine plant, very easily operated.

(The matter referred to follows:)

The original cost of installing the power plant was $4,160,000. The plant requires 54 employees for operation. The power sold in 1952 was 51¼ million kilowatt-hours. The boiler capacity is 280,000 pounds of steam per hour. The plant has 3 generators rated at 7,500 kilowatts at 0.80 power factor, but their present condition limits the output to 10,000 to 13,000 kilowatts. About 5,500 kilowatts is required for the Bureau's operation.

HYDROGENATION

Mr. Fenton. You are asking a $100,000 increase under hydrogenation.

Mr. McCabe. That is for the basic research laboratory at Bruceton, to put in this one-step gasoline coal gasification, on a lot bigger scale.

Mr. Forbes. Dr. Fenton, through this method, they have a one-step process on the coal right to the end product.

Mr. McCabe. It is the most promising thing that has developed anywhere in years.

Mr. Fenton. You are asking for $100,000 increase for research in gas production?

Mr. McCabe. Yes, that is correct. We have some five or six gasifiers at Morgantown, W. Va. We have increased the pressure, gotten away from difficulties in the slags that are involved. We think this will be a pretty good operation. And we need the $100,000 for the necessary gasifiers.

OIL SHALE

Mr. Fenton. We get back now to oil. No increase is requested in this coal to oil demonstration.

Under oil shale you are asking for $75,000 increase.

Mr. McCabe. For oil-shale mining; yes. The mining methods developed by the Bureau indicate that oil shale could be mined and delivered to a commercial retorting plant at a cost slightly more than 50 cents a ton. We have engaged in mining research work, and the methods we have seem to improve, but it is a matter of developing the field under proper mining conditions.

(Off-record discussion.)

Mr. FORBES. I would like to see the members of this committee have an opportunity to visit this shale plant at Rifle, Colo.

Mr. FENTON. I have been there.

Mr. FORBES. It is a very interesting operation.

AMMONIUM SYNTHETIC GAS RESEARCH FOR DEPARTMENT OF AGRICULTURE

Mr. FENTON. You have an item here in which you request $100,000 for research in the production of ammonium synthetic gas in which the Department of Agriculture is interested.

Mr. FORBES. Yes.

Mr. FENTON. Why are you requesting this, rather than the Department of Agriculture?

Mr. FORBES. They wanted us to do it for them.

Mr. MCCABE. Because we can get the ammonia from the raw material from hydrogenation and carbon monoxide; it is a very simple step in using the equipment which we now have, which can be done at just a fraction of the cost to anybody else in setting up a new plant with new facilities. The primary problem is one of getting gas from coal.

PERSONAL SERVICES, LOUISIANA, MO.

Mr. JENSEN. I have a few matters I would like to discuss with you gentlemen in the Bureau of Mines.

Year before last Congress placed a limitation on the amount of funds to be expended for personal services during 1952. You remember that.

Mr. FORBES. Yes.

Mr. JENSEN. This limitation appears to have been evaded by the Louisiana, Mo., project, by subcontracting operation of the power plant to private operators. In other words, the operation remained exactly the same as before, with the same employees, except the personnel was merely transferred to the contractor. It is estimated that under the arrangement during 1952, February through December, it cost the Government $99,000 more than if this contract had not been made.

This is from a detail audit by the General Accounting Office.

Mr. FORBES. Yes.

Mr. JENSEN. The contract terminated as of December 31, 1952, and all of the personnel were again put on the Government pay roll, apparently. What do you have to say to that?

Mr. FORBES. Will you reply to that, Mr. Rice?

Mr. RICE. That was done in order to keep the plant operating, Mr. Jensen, which was the only way to use the money appropriated to operate the plant and to supply utilities to the plant; there appeared to be no other way without contracting the utilities.

Mr. JENSEN. You had the directive, however, from the Congress telling you that you could not employ any more personnel, so it was done by contracting it.

Mr. RICE. We did contract to supply certain utilities—power, and so forth—that we could have produced ourselves had we had enough personnel.

Mr. JENSEN. I am not going to take that for an answer, because I am thoroughly convinced you had sufficient personnel if you had used the personnel where they should have been used.

How many people have you got in the Bureau of Mines?

Mr. RICE. About 4,000, I think.

Mr. JENSEN. About 4,000.

Mr. RICE. 5,280, as of January 31, 1953.

Mr. JENSEN. How many do you have in the administrative end of the business?

Mr. FORBES. Do we have that?

Mr. RICE. I would have to get that information and supply it for the record. That will include the regional offices.

(The matter referred to follows:)

The Bureau of Mines has 224 employees engaged in general administrative work whose salaries are paid from the appropriation "General administrative expenses."

Mr. JENSEN. How many people would it take to operate this project efficiently, in your estimation.

Mr. RICE. That would have to be supplied for the record. You mean by that, the number of people to operate the facilities that were contracted?

Mr. JENSEN. Yes.

Mr. RICE. I will have to supply that for the record. I do not know how many people were used in operating that power plant.

(The matter referred to follows:)

At the time the contract was negotiated the Bureau had 79 employees operating the power plant and other facilities. By contracting these services, 79 employees were removed from the Bureau of Mines payroll.

Mr. JENSEN. You contracted that work, and you still kept the same amount of personnel in the Bureau of Mines on this project. It certainly should have relieved you or the Bureau of Mines of considerable work and, hence, should have been a reason for a reduction in personnel, but you did not reduce your personnel, even though you entered into this contract, which cost the Government, in effect, according to the General Accounting Office, $99,000 more than if the contract had not been let.

Mr. RICE. I have not seen the audit, but I assume that the GAO has made an honest audit of it.

Mr. JENSEN. Well, it is not a very pretty picture.

Mr. FENTON. Mr. Chairman, on that item, what you are saying now is all news to me.

Mr. JENSEN. It was news to me until about 15 minutes ago, Doctor, when this report was submitted to me.

Mr. FENTON. I understood they were going to dispose of this plant, and I asked them the reason for it, not knowing about this report that you have, and, of course, you recall a year or two ago I questioned the propriety of the Federal Government going into the power business, but they explained that they were selling just the excess power. Now, this comes as certainly news to me that they contracted the thing out.

Mr. BUDGE. Mr. Chairman, I might observe that the testimony here on this particular item has not been very enlightening to the committee in view of this material which you have just furnished the committee.

Mr. FENTON. That is what I am trying to get at.

Mr. JENSEN. Let us go on. There are some more things I want to mention.

TRANSPORTATION EQUIPMENT AT LOUISIANA, MO.

For instance, transportation equipment. This memo says—

during a cursory inspection of the plant premises, one element which was ostensible was the large number of automobiles and trucks parked throughout the grounds, the inertness of such vehicles was the signal that incited our inquisitiveness. Inquiry was made into this element and our opinion, based upon the information contained in the semiannual motor vehicle report, prepared by the Bureau of Mines, as of December 31, 1952, together with a comparison of speedometer mileage readings as of December 31, 1951 and 1952, that the Bureau of Mines should be requested to justify the number of motor vehicles in use at the plant at Louisiana, Mo.

A recapitulation of the total number of motor vehicles discloses the following: Exclusive of 4 trailers and 1 crane, trucks, 50; sedans, 21; coupe, 1; station wagons, 4; ambulance, 1; fire truck, 1; wrecker, 1, for a total of 78 vehicles. Trucks in operation during calendar year 1952 were as follows: Number, 38; period of time, 12 months, and the mileage used is listed below, and here is the mileage for calendar year 1952: There were 14 trucks that had less than 1,000 miles on them that had been put on them during 1952; 11 of them ranged between 1,000 and 2,000 miles during that calendar year; 5 of them ranged between 2,000 and 3,000 miles; 5 of them ranged from 3,000 to 4,000 miles' travel during that calendar year; 2 of them ranged from 4,000 to 5,000 miles during that calendar year, and 1 of them over 5,000 miles.

Of the trucks purchased during 1952, the registered usage is shown as follows: One was purchased on February 4, 1952, and the mileage on that truck was 3,196 miles; 1 was purchased on April 21, 1952, and showed a mileage of 1,720 miles; 10 were purchased on October 29, 1952, and here is the mileage shown on those trucks: One showed 342, 1 of them showed 289 miles; 1 of them showed 120 miles; 1 of them showed 118 miles; 1 showed 108 miles; 2 of them showed 4 miles, each and the balance showed 3 miles each.

Concerning the 25 passenger-carrying vehicles, 21 sedans, 1 coupe, and 3 station wagons, all were in use for the calendar year 1952, and the mileage registered is shown below: There were 3 sedans that showed mileage during 1952 of less than 1,000 miles; 8 showed mileage between 1,000 and 2,000 miles; 5 showed mileage between 2,000 and 3,000 miles; 2 showed a mileage between 4,000 and 5,000 miles; and 3 of them showed a mileage of 5,000 miles. Station wagons: 1 showed a mileage of less than a 1,000 miles; 1 showed a mileage of between 1,000 and 2,000 miles; 1 showed a mileage of over 5,000 miles.

No question is raised concerning the ambulance, fire trucks, and wrecker, for such are recognized as necessities, although the wrecker had not been driven 1 mile during the entire year. On the basis of the usage record, even the need for a wrecker is questionable. Relative to the trucks and passenger-carrying vehicles, a total of 72 units, it is not understood how their possession can be justified on the basis of usage.

Disposal of motor vehicles: At the close of the audit it came to our attention that five trucks were recently sold with the intention of replacing them when funds are available from the 1954 appropriation. These trucks of 1942 models, were reportedly disposed of because of the heavy expense of upkeep and were sold on the basis of publicly advertised invitation for bids. Statistics of sales and 1952 costs: License number I–23501, Chevrolet, 1942, half-ton, was sold for $81.50, and the maintenance for 1952 was $55.50; Chevrolet, license number I–23502, 1942 model, half-ton, was sold for $127.50 and the maintenance costs on that truck for that year was $72.75; and the third truck was license number I–23504, also a half-ton Chevrolet truck was sold for $128 and the maintenance cost for 1952 was $41.50. Another truck, I–23508, Chevrolet, 1942, three-quarter ton truck was sold for $152.50 and the 1952 maintenance cost was $70.75; and the fifth truck, I–23512, Dodge, 1942, three-quarter ton truck, was sold for $81.50, and the maintenance on that was $20.50.

The memo further says—

it seems that a yearly maintenance cost of $259 for a fleet of 5 trucks is not a sound reason for disposal at prices obtained.

Mr. JENSEN. Now, Mr. Forbes, do you know anything about that?

Mr. FORBES. I am amazed. I positively did not know anything about it, and I am going to promise you this: That I feel just as

strongly about it as you do, Mr. Chairman; and, if you will give me a chance to clean this thing up, I will certainly do so. It certainly is embarrassing to me.

Mr. JENSEN. It certainly is going to take a housecleaning, not only of these trucks but all people who are responsible for this kind of business.

Mr. FORBES. We are sure going to do it, Mr. Chairman.

Mr. JENSEN. I do not mean "maybe." That is the most disgraceful showing that I have seen of any Department, and I did not suppose it existed in the Bureau of Mines.

Mr. FORBES. I am awfully sorry.

Mr. JENSEN. I have defended the Bureau to quite some degree, as has Dr. Fenton; but, when you see a record like that and the waste of the taxpayers' money, it is disgraceful.

Who is in charge of that program out there?

Mr. FORBES. Dr. L. L. Hirst is in charge of the Louisiana plant.

Mr. JENSEN. Who is in charge of these trucks and this equipment?

Mr. FORBES. I imagine the whole thing would come under him, Mr. Chairman.

Mr. JENSEN. Who requisitions for these trucks?

Mr. FORBES. That is another thing I want to find out about.

Mr. JENSEN. I presume you have received requests in the Bureau here?

Mr. FORBES. Yes, sir.

Mr. JENSEN. Requests for automobiles and trucks for the Bureau of Mines, and there you have all of these trucks and tractors and wreckers and ambulances standing there. I will venture that you are asking for a number of automobiles and trucks right here in this bill.

Mr. FORBES. We need those for very important services under this coal-mine-inspection work.

Let me say this to you, Mr. Chairman——

Mr. JENSEN. I know you are asking for a number of them.

Mr. FORBES. Yes, sir.

Mr. JENSEN. Now, when that memo was brought to me at 15 minutes before 12 o'clock today, I read it, and if it had been anyone else but the General Accounting Office and the investigating staff which we have now at work—and we have told them to go on no "witch hunts" but to bring us facts—if most anyone else had told me that such a condition existed, I would have said: "Now, wait a minute; you had better take another look at that," but that must be the truth, the whole truth and nothing but the truth. I am going to accept it as such until someone can prove differently, which I do not believe they can.

Mr. FORBES. The only thing I want to say, Mr. Chairman, is give me an opportunity to clean this thing up and I will certainly do it.

Mr. JENSEN. Well, you know Congressman Fenton is in charge of this part of the appropriation bill, and you are going to have to be accountable to Dr. Fenton, of course, as well as the rest of the committee, and to the Congress, and to the people of America.

Mr. FORBES. I want to see every dollar of the taxpayers' money spent in the proper fashion, and I am just as amazed and disgusted with

that report as you are, Mr. Chairman. I want to look into it; and, believe me, any of the excess trucks and automobiles that are there will certainly be moved out of there to other locations where they may be needed.

Mr. RICE. Mr. Chairman, we are closing this plant, as we had indicated earlier.

Mr. JENSEN. Well, I would think you would.

Mr. BUDGE. We went into that in some detail in response to Dr. Fenton's questions, and this matter of the subcontract was never mentioned to the committee.

Mr. FORBES. That is right.

POWERPLANT CONTRACT

Mr. BUDGE. I think there has obviously been a breach of faith with this committee and there has been a breach of faith with the Congress of the United States in regard to the instructions which were spelled out in their appropriation bill for 1952. I think, also, Mr. Chairman, it is very possible that there is an item of illegality in that subcontract which this committee should look into. Certainly, we should know who is responsible for an out-and-out violation of the expressed intention of the Congress. I think it would be your duty, Dr. Forbes, to furnish the names of the people who approved that subcontract to this committee.

Mr. FORBES. I will be very happy to do it.

(The matter referred to is as follows:)

Before the contract was submitted for my approval and signature as Director, it had been approved and signed by Phineas Indritz, attorney-adviser; Donald G. Welsh, Chief Counsel; Edward Maye, Assistant Chief, Property Management Branch; J. D. Secrest, Chief, Property Management Branch; John G. Tripp, technical assistant to the Chief, Synthetic Liquid Fuels Branch; Harry Perry, Assistant Chief, Fuels and Explosives Division; and W. E. Rice, Chief, Administrative Division.

Mr. FORBES. There are a lot of contracts that pass over my desk that I do not have the time nor the opportunity to read in detail and go into them the way I would like. I expect the people down the line that are responsible for these things to make sure before any get to my desk that it is O. K.

Mr. BUDGE. I appreciate that, Doctor.

Mr. FORBES. It is impossible for me to go over all of these contracts that pass over my desk; I would not get anything else done.

Dr. MCCABE. Mr. Forbes had just recently become the Director of the Bureau at that time.

Mr. FENTON. How much longer under the authorization does this research have to go on?

Dr. MCCABE. The Synthetic Fuels Act is effective until April 1955.

Mr. JENSEN. Dr. Forbes, you knew about this contract, did you not?

Mr. FORBES. Not too much about it.

Mr. JENSEN. Well, you knew it had been let?

Dr. MCCABE. Mr. Chairman, although Mr. Forbes was Director of the Bureau of Mines at the time this contract was made, he had only been Director for a short time.

Mr. JENSEN. What is your position? You were in charge to some degree, at least, of this Louisiana, Missouri, setup?

Dr. MCCABE. I had been in my present position for about 9 months at the time the contract was made. When the contract was authenticated I was away from my office and it was surnamed by my assistant who at the time was acting for me.

Mr. FENTON. They certainly never mentioned anything about contracting that last year.

Mr. JENSEN. You have seven people here, Dr. Forbes. Is there anyone in this room on your staff that knew about this contract being let? You have been here all the morning, as I understand, talking about this budget and not one of you ever said one word about this contract being let to the chairman, Congressman Fenton, or any of the other members of the committee?

Mr. FENTON. Unless I am mistaken, Mr. Chairman, I understood only that they were going to let the contract.

Mr. JENSEN. All right, we will watch the record. We will find that in the hearings. As you gentlemen know, you can make corrections in your remarks in the record, but you cannot change the meaning of a statement.

Mr. FORBES. That is right.

Mr. JENSEN. We want the meaning of your statements to read about the same, with the same meaning as you intended to give the committee.

Mr. FENTON. Mr. Chairman, that is why I interjected when you were reading this.

Mr. RICE. May I answer one question which you have just asked Mr. Forbes?

Mr. JENSEN. Yes.

Mr. RICE. You asked Mr. Forbes whether there was anyone in this room who was aware of that contract, and I was aware of that contract and I was aware of it from the time of its inception.

Mr. JENSEN. I thought you were.

Mr. RICE. I was aware of it having cleared through the Chief Counsel of the Bureau, and I cannot say for certain at this time, but I think it was cleared through the Comptroller General before the contract was let. It was done as the best means to keep that plant going and still stay within the law, limiting the number of employees that we could have.

Now, further, I would like to say that you have given us a whole lot to answer here, and the Bureau of Mines, until you brought that report in here, was unaware of its existence. We have been well aware of the audit that the General Accounting Office has been making of all of the activities of the Bureau of Mines. We received yesterday afternoon a copy of that audit report, which was quite a bulky volume, and which I understand will be transmitted officially to the Congress.

I understand further, although I have not read all of that report, that this material which you have presented this morning on the Louisiana plant is not in that report. The Bureau of Mines never has seen this and we cannot give you any kind of an answer on it, or even make a decent investigation of it, until we can get by some means, either from your office or from the General Accounting Office, a copy of this report.

Mr. JENSEN. All right. It is never my purpose to be unfair to my fellow man. I always insist that if a charge is made, the person against whom the charge is made should have plenty of time to answer such charges. That is according to our American way of doing things and so I hand you this memo, Dr. Forbes.

Mr. FORBES. It is a red-hot one.

Mr. JENSEN. And I shall give the Bureau of Mines an opportunity to answer in detail, with your permission, Mr. Fenton.

Mr. BUDGE. Mr. Rice, I assume that before this contract was let, you would have a written opinion on that from the Solicitor General, would you not?

Mr. RICE. We had an opinion from the Department of the Interior, as I recall it, and from the Chief Counsel of the Bureau of Mines. I think in addition to that, we had an opinion from the Comptroller General.

Mr. BUDGE. Would you furnish a copy of those opinions to the chairman?

Mr. RICE. Naturally we will in making our reply.

Mr. BUDGE. I do not want to burden the record with them, but I would like to see them.

(The matter referred to follows:)

JUSTIFICATION FOR OPERATING CONTRACT IN 1952, DEMONSTRATION PLANT AT LOUISIANA, MO.

When the 1952 allotments were made late in 1951, reduction of 10 percent in funds for personal services for the full year would have required a reduction of 18 percent in personal service funds for the Louisiana, Mo., demonstration plant plant for the remainder of the 1952 fiscal year. This would have required reduction in force of 130 employees or about 26 percent. Such a drastic reduction would have prevented the effective carrying out of the program which Congress had authorized, and for which Congress had appropriated funds. The Synthetic Liquid Fuels Act (Public Law 290, 78th Cong.) specifically authorizes the Secretary of the Interior to contract for the operation of the demonstration plants. This authority is given in section 2 (c) of the act, which reads as follows: "to engage, by contract or otherwise, engineers, architects and any private industrial organization or any educational institution he deems suitable, to do all or any part of the work of designing, constructing, or operating the plants, the operation to be under his supervision, and through leases or otherwise as he believes advisable."

As this authority was available and as it appeared that use of this privilege to alleviate but not to avoid the effects of the reduction would permit continued operation of the demonstration plant on a basis not too inconsistent with the total funds appropriated by Congress, steps were taken to contract for the operation of the power plant, water filtration plant and hydrogen manufacturing by cracking of natural gas. This matter was taken up with the legal staff of the Bureau of Mines and with the Division of Water and Power of the Interior Department, with respect to operation and maintenance of portions of the demonstration plant.

Before entering into this contract bids were solicited in accordance with usual government procedure. Invitations to bid were acknowledged by seven firms, and two bids were received.

The Contract No. Im 7076 was awarded to Gesco, Inc., as of January 15, 1952. The contract was signed for the United States of America by L. L. Hirst as contracting officer. Dr. Hirst is Chief, Synthetic Fuels Demonstration Plant, Louisiana, Mo. The contract was approved by J. J. Forbes, Director of the Bureau of Mines. It was surnamed by the following prior to approval by Mr. Forbes:

Phineas Indritz, attorney-adviser
Donald G. Welsh, Chief Counsel
Edward Maye, Assistant Chief, Property Management Branch
J. D. Secrest, Chief, Property Management Branch

John G. Tripp, technical assistant to the Chief, Synthetic Liquid Fuels Branch
Harry Perry, Assistant Chief, Fuels and Explosives Division, acting for L. C. McCabe, Chief, Fuels and Explosives Division
W. E. Rice, Chief, Administrative Division

An opinion was not obtained from Comptroller General before letting this contract because section 2 (c) of the Synthetic Liquid Fuels Act (Public Law 290, 78th Cong.) specifically authorizes the Secretary of the Interior to contract for all or any part of the operation of the demonstration plants. However, a copy of the contract was filed with the General Accounting Office and subsequently vouchers for payments under the contract were passed without question.

On March 31, 1952, the Chief, Budget and Finance Branch of Region VIII, Bureau of Mines, requested the Assistant Chief of the Audit Division of the General Accounting Office in Washington to make an on-site audit on this contract at his earliest convenience.

Had the personnel of the demonstration plant been reduced to achieve the full 18-percent reduction in funds for personal services, the production of excess power for sale to the cooperative and the public utility would have ceased. Such a step would have increased the cost of power used for the Government operations.

Since the production of excess power at Louisiana, Mo., is accomplished without cost to the Government, the receipts delivered to the Treasury being greater than the cost of power production, there would be no benefit to the Government in curtailing this activity and, as pointed out above, there would have been an actual increase in the Government expenses. It has been estimated that the additional cost of producing steam and power for the Bureau of Mines operations would have been increased by approximately $50,000 during the 1952 fiscal year if the production of excess power had been abandoned.

The statement that "it is estimated that this arrangement during 1952 (February through December) cost the Government over $99,000 more than if this contract were not made" cannot be discussed in detail without a study of the report and a complete study of the accounts. However, it should be pointed out that the figure of $99,000 covers parts of two fiscal yers, therefore, for the fiscal year 1952, the additional cost on the same basis would have been about $45,000, which can be compared with the estimated saving by excess power production during this period.

The direct cost of having operations conducted by contract is usually greater than having the Government do the work, as the contractor normally gets a profit. However, contracting for work is commonly authorized by Congress. For example, much of the work of the military and the Atomic Energy Commission is conducted through contractual arrangements. However, the direct cost of a contract is not necessarily an accurate gage of ultimate cost. For example, the contract under discussion permitted some of the supervisory officials of the Bureau of Mines to devote a greater percentage of their time to the technical phases of the synthetic liquid fuels production which are the primary objectives of the program. The value of this is real but difficult to estimate. It should also be pointed out that under the contract in question work was done on certain items of rehabilitation and improvement that would not have been part of the normal operation and maintenance of these facilities. For example, the following items completed in fiscal year 1952 under this contract would have been taken care of by other contracts even though the Bureau had continued to operate these facilities:

1. Coal chutes renewed.
2. Coal elevator reconditioned.
3. Fuel oil system rehabilitated.
4. Water treating system revamped.

While the privilege granted by Congress to the Secretary of the Interior for contracting part of the operations was used to alleviate the drastic effect of the reduction in funds for personal services, it should be noted that the spirit of the law was followed and there was a sizeable reduction in personnel other than those operating the powerplant. Even before this privilege was exercised, the total number of employees at Louisiana, Mo., was reduced from 502 on August 11, 1951, to 438 on January 26, 1952, a reduction of nearly 13 percent. This reduction was effected before laying off the powerplant employees who were then hired by the contractor. This additional layoff of 79 occurred on February 1, 1952.

[PUBLIC LAW 290—78TH CONGRESS]

[CHAPTER 172—2D SESSION]

[S. 1243]

AN ACT Authorizing the construction and operation of demonstration plants to produce synthetic liquid fuels from coal, oil shales, agricultural and forestry products and other substances, in order to aid the prosecution of the war, to conserve and increase the oil resources of the Nation, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Interior, acting through the Bureau of Mines, within the limits of critical materials available, is authorized for not more than five years to construct, maintain, and operate one or more demonstration plants to produce synthetic liquid fuels from coal, oil shale, and other substances, and one or more demonstration plants to produce liquid fuels from agricultural and forestry products, with all facilities and accessories for the manufacture, purification, storage, and distribution of the products. The plants shall be of the minimum size which will allow the Government to furnish industry the necessary cost and engineering data for the development of a synthetic liquid-fuel industry and of such size that the combined product of all the plants constructed in accordance with this Act will not constitute a commercially significant amount of the total national commercial sale and distribution of petroleum and petroleum products. Any activities under this Act relating to the production of liquid fuels from agricultural and forestry products shall be carried out in cooperation with the Department of Agriculture and subject to the direction of the Secretary of Agriculture.

SEC. 2. In order to carry out the purpose of this Act, the Secretary of the Interior is authorized—

(a) to conduct laboratory research and development work, and with pilot plants and semiworks plants to make careful process engineering studies along with structural engineering studies in order to ascertain lowest investment and operating costs, necessary to determine the best demonstration plant designs and conditions of operation;

(b) to acquire, by purchase, license, lease for a term of years or less, or donation, secret processes, technical data, inventions, patent applications, patents, irrevocable nonexclusive licenses, and other rights and licenses under patents granted by this or any other nation; to acquire by purchase, lease for a term of years or less, or donation, land, and any interest in land (including easements and leasehold interests), options on real or personal property, and plants and their facilities; to assume the obligation to pay rentals in advance on property so acquired, and to pay damages arising out of the use of any such property: *Provided, however*, That the maximum quantity of land or any interest therein, or any other property, acquired hereunder shall not exceed that necessary to carry on experiments for the purposes herein provided;

(c) to engage, by contract or otherwise, engineers, architects, and any private industrial organization or any educational institution he deems suitable, to do all or any part of the work of designing, constructing, or operating the plants, the operation to be under his supervision, and through leases or otherwise as he believes advisable;

(d) to cooperate with any other Federal or State department agency, or instrumentality, and with any private person, firm, educational institution, or corporation, in effectuating the purposes of this Act.

SEC. 3. The Secretary of the Interior is authorized to sell the products of the plants at not more than actual cost, including amortization of capital expenses, as determined by him, to any department, agency, or instrumentality of the Federal or any State government, but priority shall be given to orders placed by the War or Navy Departments. Any remaining products may be sold at going prices to any purchaser through regular commercial channels. The Secretary of the Interior, subject to approval by Congress, shall also have authority to dispose of any lands or other real or personal property acquired, but in his opinion no longer useful, for the purposes of this Act; and he shall have authority to grant, on such terms as he may consider appropriate, licenses under patent rights acquired under this Act: *Provided*, That such licenses are consistent with the terms of the

agreements by which such patent rights are acquired. No patent acquired by the Secretary of the Interior under this Act shall prevent any citizen of the United States, or corporation created under the laws of the United States or any State thereof, from using any invention, discovery, or process covered by such patent, or restrict such use by any such citizen or corporation, or be the basis of any claim against any such person or corporation on account of such use.

Sec. 4. All moneys received under this Act for products of the plants and royalties shall be paid into the Treasury as miscellaneous receipts. The Secretary of the Interior shall render to Congress on or before the first day of January of each year a report of all operations under this Act.

Sec. 5. The Secretary of the Interior may issue rules and regulations to effectuate the purposes of this Act. The authority and duties of the Secretary of the Interior under this Act shall be exercised through the Bureau of Mines of the Department of the Interior.

Sec. 6. There is authorized to be appropriated not to exceed the sum of $30,000,000 to carry out the provisions of this Act.

Approved April 5, 1944.

(PUBLIC LAW 443—80TH CONGRESS)

(CHAPTER 117—2D SESSION)

(H. R. 2161)

AN ACT To amend the Act entitled "An Act authorizing the construction and operation of demonstration plants to produce synthetic liquid fuels from coal, oil shale, agricultural and forestry products, and other substances, in order to aid the prosecution of the war, to conserve and increase the oil resources of the Nation, and for other purposes", approved April 5, 1944 (58 Stat. 190).

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Act of April 5, 1944 (58 Stat. 190), is amended by changing the words "five years", in the first sentence, to read "eight years", and by changing the numeral "$30,000,000" in section 6 to read "$60,000,000" and by adding to section 1 of the Act the following: "and that not to exceed $1,000,000 of the amount authorized by this Act may be applied to a program of production research on secondary recovery from stripper oil fields and in refining processes".

Approved March 15, 1948.

(PUBLIC LAW 812—81ST CONGRESS)

(CHAPTER 988—2D SESSION)

(H. R. 8975)

AN ACT To amend the Synthetic Liquid Fuels Act, as amended.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Synthetic Liquid Fuels Act of April 5, 1944 (58 Stat. 190), as amended by the Act of March 15, 1948 (62 Stat. 79), is further amended by changing the words "eight years" in the first sentence to read "eleven years", and by changing the amount "$60,000,000" in section 6 to read "$87,600,000".

SEC. 2. Of the sum authorized in section 1 of this Act, not to exceed $2,600,000 shall be used for the construction and equipment of an experiment station in or near Morgantown, West Virginia, for research and investigation in the mining, preparation, and utilization of coal, petroleum, natural gas, peat, and other minerals.

Approved September 22, 1950.

Mr. RICE. In making our reply, we will submit everything that we have that will have a bearing on these questions that have been raised.

There is one thing more I would like to say. You said we had been discussing this this morning, and there was some more or less loose talk about what we were going to do with that plant, and someone said we were going to sell it and someone said we were going to lease it. If I had had an opportunity speak at that point—I doubt if I know; we do not have authority to sell it, because the Army has

first rights to take it back when we do not want it. I do not know whether we can lease it or not, and I should have said that I think the only "out" to meet our obligations to the subcontractor, and obligations to these power companies that are buying power from us, is to again contract the operation of the plant. I think that is the only "out" to do what we were talking about in the discussion that you started earlier.

Mr. BUDGE. Well, I might say, in answer to that, that I did not get very much from the discussion, in view of the information which Mr. Jensen brought in.

Dr. MCCABE. He was talking about fiscal 1952, in which this contract was recessed. You see, in 1953, as I understand it, we came back to the full operation of the plant; 1952 was what he was talking about and at that time this appropriation for excess power would not have applied. I think that is right.

Mr. RICE. The excess power was then being sold.

Dr. MCCABE. But we did not contract that plant in 1953. It was operated by the Bureau in 1953.

Mr. FORBES. Yes, but this excess-power thing has been going on for 3 or 4 years now.

HELIUM PROGRAM

Mr. FENTON. What is the situation with regard to your helium program?

Mr. FORBES. A little bit later, we will come in for an expansion of the helium program, but that will be a supplemental.

Dr. MCCABE. The situation with regard to helium is that we are approaching capacity and the defense requirements and by industry are great. The Atomic Energy Commission is now coming in to use helium in large quantities. We have had a survey made by the defense organizations and that will be available to the Congress as soon as we can get it finished, but we have asked for no increase in the estimates now before you.

Mr. FORBES. I might say, I think, it might be well for Dr. McCabe to put in the record just what is transpiring in connection with this problem in regard to the supplemental that may come up later on.

Mr. FENTON. You might tell us what you have planned.

Dr. MCCABE. The Exell, Tex., plant is now making 75 million cubic feet a year, and its expansion will being it up to 170 million cubic feet a year, by putting in additional equipment that will cost about $8 million. We had just about reached the capacity of three plants and the fourth plant is being placed in operation. It looks like we probably will need another 110 or 115 million cubic feet of helium capacity in the next year. The four plants now have capacity of about 213 million cubic feet a year, and the expansion at Exell would bring the total to 308 million. So, that would give just about enough capacity for the near future, but the way the use of helium is expanding, particularly for welding magnesium and aluminum and new metals like titanium, it seems that further expansion will be needed later. You see helium is used for arc welding to keep from burning the metal up, and the demand is going to increase; and, of course, the AEC is using it for something, but we have not been told how it is used. We know that the demand is going up.

Mr. FENTON. Before we get off coal altogether, it was drawn to my attention that there was some criticism about the coal stock report for the retail coal dealers. What do you know about that?

Dr. MCCABE. Is it the slowness of it, Dr. Fenton, or the inaccuracy?

Mr. FENTON. I will read this letter, which was addressed to a Member of Congress:

> Mr. Ross has asked me to write you regarding the coal stock report which the retail coal dealers are asked for by the Bureau of Mines, College Park, Md., branch. As I understand the matter, there is quite a balance still unused of the appropriations set aside for this work. There might have been some excuse for it during World War II, but there is certainly no excuse or reason for it at the present time, nor has there been for some years. Ninety percent of the coal dealers do not even bother to return the forms, and, if they did, the information would be of no value to anyone. There is no shortage of coal, nor is there about to be. This certainly offers an opportunity for economy without curtailing the services of the Federal Government. Any portion of the original appropriation still remaining could certainly be spent in some more profitable endeavor.

This relates to the forms you request to be filled out by the coal dealers?

Dr. MCCABE. It is a voluntary form and the Bureau of the Budget has approved our circulating that form to the dealers. Now, I cannot offhand tell you what return we get, but I would say in the neighborhood of 40 percent, but it is a statistical sampling and we can take that 40 percent and, by experience records we can get a more accurate figure of the amount of coal in stock.

The time that that is particularly important to us is when we get a long coal strike when the President needs to know what to do about strike matters, you see, Dr. Fenton, and that information was used on those matters when strikes would come up. I know we will get, every 4 or 5 years, to a point where the President's office asks us to make a day-by-day report on the stock, to keep certain areas from getting into trouble. He might have declared an emergency and that is primarily what it is for. It is very valuable to the industry itself to know stock positions. I do not know what he might mean there by "unused funds." I do know those funds are committed and, actually, we have been refusing to employ any further people for the rest of the year, because we know the funds are committed. I have had requests from that branch on several occasions to employ additional people and we have turned them down.

Mr. FENTON. In what part of the justifications do you find that?

Dr. MCCABE. Under the production and distribution item, which is item 7.

Mr. FENTON. You are not asking for any more money?

Dr. MCCABE. No, sir; we are not asking for any increase.

Mr. FENTON. Did you use it all up?

Dr. MCCABE. Yes, sir; we have used it, and I might say this, that we have been trying to improve that service and to reduce the personnel employed. The Director about a year ago had a survey made by the American Statistical Association and composed of 3 statisticians, 1 from Dun & Bradstreet, 1 from Johns Hopkins, and 1 from Harvard, and they have made that report and we are in the process of implementing it to try to improve the service and to streamline it.

Mr. FENTON. Would you mind sending to the committee a detailed report on that?

Dr. MCCABE. We will be glad to.

(The matter referred to follows:)

MONTHLY SURVEY OF RECEIPTS, DELIVERIES, AND STOCKING OF COAL BY RETAIL COAL DEALERS

The questionnaire form used in this survey, entitled "Coal Stock Report—Retail Coal Dealers," it is a very simple monthly report form pertaining to receipts and deliveries of coal by retail coal dealers and to stocks of coal on hand at dealers' yards at the end of each month. This information, together with data on the stocking and consumption of coal by other major consuming groups throughout the country, has been collected on bituminous coal for many years by the Bureau of Mines. Anthracite was added to the survey in 1950 at the request of anthracite producers and retail dealer representatives and in response to requests from Congress, State and local governments, and others for information on anthracite stocks in times of emergencies in fuel availabilities.

Of the tens of thousands of retail coal dealers throughout the country, only a very small portion (1,200 for bituminous coal and 1,793 for anthracite) are participating, at the request of the Bureau of Mines but on a voluntary basis, in the submittal of these reports which provide the Bureau with an authoritative sample upon which to base reliable estimates of coal stocks at, and the volume of deliveries from, retail coal dealers' yards each month. Not only does this information provide a balancing factor in accounting for total coal consumption and stocks throughout the country at any given time, but, among other useful purposes, it is also a barometer of economic activity in the fuel industries, it is indicative of trends in fuel consumption, and it provides a ready understanding of fuel availabilities in times of emergencies due to strikes, transportation shortages, inclement weather, or other factors.

Over the years this information has proved to be of great value to the retail coal industry itself, as well as to coal producers, the Government, and the public. It has become very valuable as a measure of the changes that have been taking place in the Nation's fuel consumption pattern, particularly with regard to the competitive relationship between coal and other sources of energy. Similarly, these data have been used by various congressional committes in investigations pertaining to national fuel policies, to appraisals of New England fuel supplies, and to fuel availabilities in times of emergency. As an example of the latter, retail coal dealers' stocks were the occasion of a special hearing before the Senate Committee on Labor and Public Welfare during the coal strike in January 1950, at which time they also were a special topic at White House discussions.

Other examples of the usefulness of this information are indicated by Bureau reports showing figures based on the survey. Page 1 of Weekly Coal Report No. 1851 shows the latest figures on stocks and "consumption" of bituminous coal and lignite throughout the country. The record of retail dealer stocks of 1,489,000 tons of coal on January 31, representing an average of 6 days' supply at the January rate of daily deliveries, would not be available without the voluntary cooperation of representative retail coal dealers in this survey. The same can be said for the information pertaining to retail deliveries and days' supply, as shown on page 80 of Mineral Market Report No. 2102, and to retail dealers' stocks of anthracite as shown on page 2 of Weekly Anthracite Report No. 814.

The voluntary cooperation of selected retail coal dealers in filing these brief monthly reports covering their deliveries and stocks of coal is a real public service that contributes to a better understanding of our Nation's fuel problems than otherwise would be possible. As the Bureau does not wish to impose a burden on any retail coal dealer with respect to the filing of these reports, it is clearly pointed out to all to whom requests for cooperation are made that the filing of these reports, which has been approved by the Bureau of the Budget, is entirely voluntary. Fortunately the Bureau receives a high degree of cooperation from the retail coal dealers in the submittal of these reports, for which it is grateful on behalf of all concerned.

MINERALS AND METALS

Mr. FENTON. We now come to the question of minerals and metals. As I asked, Mr. Forbes, I would like all information which we can get on this subject.

Mr. FORBES. This is a very important part of the work of the Bureau of Mines. I have here with me Mr. Zinner, who is Chief of our Minerals Division and knows much more about the details of his presentation than I and I am going to ask Mr. Zinner if he will carry on with minerals and metals.

Mr. ZINNER. There has been a change in the method of compiling this information and I would like to make just a short statement on program procedure, if you do not mind.

Mr. FENTON. There has been a change in the budget?

Mr. ZINNER. No, in the procedure for arriving at the present presentation. There has been some change in the budget item structure, that I think we should explain before we go into the individual items.

FERROUS METALS AND ALLOYS

Mr. FENTON. Before we go into it at all, insert page 36 of the justifications into the record at this point.

(The matter referred to follows:)

Ferrous metals and alloys

Subactivity	Appropriation, 1953	Decreases	Base, 1954	Estimate, 1954	Increases
(1) Iron	$247,798		$247,798	$317,798	$70,000
(2) Steel	225,847		225,847	225,847	
(3) Manganese	653,134		653,134	975,861	$322,727
(4) Chromium	300,271		300,271	300,271	
(5) Ferroalloy Metals, General	209,841		209,841	389,841	180,000
(6) Maintenance, buildings and facilities	156,828		156,828	156,828	
Total	1,793,719		1,793,719	2,366,446	572,727

GENERAL STATEMENT

Mr. FENTON. Do you have a prepared statement on this subject?

Mr. ZINNER. Yes, sir.

Mr. FENTON. You may offer it for the record at this point.

(The matter referred to follows:)

This is the first time in the history of the Bureau of Mines that a plan of action has been formulated in the presence of a fully documented program covering the long-range, immediate, and emergency objectives of the Bureau in the field of minerals and metals.

In this plan of action all available and pertinent factual data related to supply and utilization of every significant mineral commodity has been recorded opposite present and anticipated technological problems and the elements of reasoning necessary to project such data into practical and productive effort.

The product of this operation is, as you might well expect, a very long list of areas of endeavor all of which would certainly contribute in varying degree to the solution of the Nation's immediate and anticipated mineral problems. We have separated from this lot those research and development problems that might fall logically to industry and industry-sponsored or private or State research establishments and further—those areas of effort that industry might conceivably be encouraged to undertake.

Finally the plans of action have been reduced to only those activities of Government where the Bureau of Mines has responsibility or some special ability, talent, facility, and authorization to perform. Therefore, we do not intend to infer that successful implementation or even conclusion of the documented programs would solve all of the Nation's mineral problems because the plans of action restrict the Bureau of Mines activities to the most pressing objectives—to those that are clearly in the national interest—and to those that come within the normal obligations of the Bureau of Mines within its existing authorities.

Even in this category the number of unquestionably desirable operations would involve funds far in excess of the portion of the current budget assigned to minerals

and metals. Accordingly, a procedure has been adopted that permits selection of activities on a priority basis determined by the degree to which they appear to contribute to the solution of the problems or broad objectives developed in the formulation processes.

The elements determining priority of effort are oriented to national needs, present and future. Regional problems and those involving specific segments of the minerals industry are also factors—but not overriding ones. Advices for determining these priorities are gained from such sources as (1) the Munitions Board (list of strategic and critical materials), (2) the defense agencies (Defense Production Administration) stockpile lists in the priority system for guidance of agencies involved with execution of the defense program, (3) the results of cooperative endeavor such as The Mineral Position of the United States (hearings before a Subcommittee of the Committee on Public Lands, Senate, 80th Cong., 1st sess., Washington 1947), (4) such statistical information as the changes in average grades of ore mined over specific periods, (5) strategic stockpiling requirements, (6) such programs as point 4, NATO, and other obligations of international nature, (7) the atomic energy program has a major bearing on the determinations, (8) on a regional basis, the findings of interdepartmental river-basin program, and the like.

With proper rationalizing through this procedure twice—first, in conveying the result in the form of budget estimates to the Department and, second, in adjusting the program to the recommendations of the Bureau of the Budget we arrive at the present presentation.

You will have observed that there are fewer subactivities under the titles "Nonferrous metals" and "Nonmetallics metals" than last year. Actually this merely represents a consolidation of the subactivity items to effect a more proper presentation. For example: "Titanium" appeared last year as a separate subactivity whereas this year it is included in the "light metals" group. Similarly "Zirconium" moves into the "Rare and precious" item.

This year the extent of the entire rare and precious metals program is clearly defined under a single title.

All of the proposed work under each of the subactivity titles is the product of the new programing procedure. After proper adjustment of individual items of work permitted under the base program the proposed increases are designed to bring the plan of work into balance with the criteria developed in the program.

Mr. ZINNER. I think this statement emphasizes that many of the increased items are for the purpose of supplementing what had previously been termed a base program, rather than to introduce new activities.

Mr. FORBES. Mr. Zinner, would you tell the chairman about the formulation of the programs on metals and minerals. I think it is certainly worthwhile. The whole thing is systematized. They spent upward of 7 months compiling this information and putting it in a systematic form. I would like for you to elaborate a little bit on that.

Mr. ZINNER. In trying to describe all of the reasoning behind our work on every major commodity we ended up with a document that resembles an unabridged dictionary. We sent the chairman of this committee one copy of that document, as an illustration of what we are talking about. It is emphasized that this is an internal document essentially for the guidance of our people in the Bureau of Mines.

When work is proposed it has to meet certain standards and it has to contribute to one or the other of the criteria that are developed through the program formulation procedure. Through the process of elimination, the best ideas that are considered solutions to certain clear problems, come automatically to the top and form the basis for any compilation related to budget formulation. There is a detailed system set up for determining the way projects are proposed and how they go up through the echelons to the Director. The Director has to approve every one of these that might go into the budget presentation and finally every one that is authorized after the budget comes into existence. We feel that the procedure has considerable merit;

It has substantially changed the type of activities under each one of the mineral commodities titles in the so-called base program. I think we will be able to measure results in a much more concrete manner than we have in the past.

CURTAILMENT OF SYNTHETIC LIQUID FUELS PROGRAM

Mr. BUDGE. Doctor, as I understood the testimony this morning, you are actually farther along on the oil-shale program than you are on the hydrogenation and the gas synthesis.

Dr. MCCABE. That is correct.

Mr. BUDGE. As I understand, the $2 million cut that is to be made, will be made in the hydrogenation and gas-synthesis program, rather than the one which has progressed further along.

Dr. MCCABE. That is correct.

Mr. BUDGE. Why should that be? Why should not the cut more logically fall on the program which has developed to the furthest point, so far as showing industry what can be done in this regard?

Dr. MCCABE. I think that we could answer it this way: At the time the synthetic-fuels program began, there fell into our hands the blueprints of the German gasification synthesis work. The hydrogenation and gasification programs are essentially German programs. They were used in Germany from 1939 on through the war.

The Louisiana plant for hydrogenation was built, with some improvements, essentially along the German lines and even with some German equipment. We imported some German equipment and built it into that plant. The same was true with gasification, with, perhaps, more changes in gasification improvements than the Germans were using. At the same time this demonstration-scale plant was producing 300 barrels a day on hydrogenation and 50 barrels a day on gasification, we were doing basic research to improve the process at Louisiana, Mo., and at Morgantown, W. Va., we have been running the gasifier.

The hydrogenation plant is a two-step process. We make an oil, and then you have to take the oil to another plant through a second step to make it into gasoline. At our research plant which is located near Pittsburgh, we have come through with a one-step process, and we make about half gasoline and half gas, which essentially is comparable to natural gas. We can take that on through a little larger scale, and you begin to get the ideas as to costs, but we think it is a great step ahead of the old German process on hydrogenation.

We feel now we have learned what we need to know out of the older type of hydrogenation and we can bring this one-step process along; and if in 2 years, say, we are far enough to feel we need a big-scale operation, we will come back and ask Congress for funds to scale that up if we can justify it. It may not be necessary to take it up through the larger scale, because maybe industry will take up it from the smaller scale work done by the Bureau.

With the gasification program, the big gasifier at Louisiana, Mo., operates at an atmospheric pressure, which is not as economical in production of gasoline as the high pressure operation. We now have at Morgantown, W. Va., a gasifier, and we have gotten it up to 450 pounds a square inch, and that is very much more economical in the use of power and in the production of gasoline than the other.

So, we feel we have learned what we need to know about these older types of operation, but yet costwise, the petroleum industry said it would cost 47 cents a gallon to make gasoline by hydrogenation.

In Louisiana, Mo., our people made some estimates, assuming they could sell the chemicals, of gasoline costs around 12 cents a gallon. There was quite a difference of opinion upon that, but I think the reason is that if you ran two big synthetic fuel plants your chemical market would become saturated, so you could not go on building those. That is where the difference of opinion over cost came in. The point is, that as a process, we have learned what we need to know out of it.

With reference to the gasification process, the Petroleum Advisory Council to the Secretary came out with a figure the other day that it would cost 29 cents a gallon to make gasoline by that process. We have gotten a great deal of technical information out of it, and we can put this plant on a standby basis and build our basic research up to the point it is now indicated it will go.

On the other hand, with the oil shale, we have the process, we feel, right along where in the next year or two, we think we can get the industry into it. We have come along and made, I think, rather remarkable progress on the oil-shale program from almost nothing, and I think our whole effort will be devoted to getting industry into this in the next couple of years.

Mr. BUDGE. Industry is more likely to go into the oil-shale field than the other; is it not?

Dr. MCCABE. That is right, I think unquestionably, because the estimated cost now is of the order of 14.7 cents a gallon. The west coast needs the oil, and there is a deficit of crude oil out there, and they import a great deal of it, but you are not going to ever be able to move great quantities of oil east of the Mississippi into the eastern area of the United States, because of the cost of transporting it. You have got a water limitation on the Colorado River. We could probably sustain them on liquid fuel from the oil shale, but your water cuts you off after a while and it depends on how large an industry you can build there.

Mr. BUDGE. This is what I still do not understand: You have these two programs and you are much farther along on the oil-shale program than you are on the other one.

Dr. MCCABE. Yes.

Mr. BUDGE. And industry is much more apt, certainly from what you have said, to go into the oil-shale program than they will the other program and yet you are cutting back your expenditures $2 million in the program which is not as far developed. That does not sound logical to me.

Dr. MCCABE. I think if you look at the breakdown, you will see we are still spending more on coal and coal hydrogenation and gasification, I believe, than we are on oil shale. The first item there, coal-to-oil research, which is going on at Bruceton, Pa., is on gas synthesis and hydrogenation.

Mr. BUDGE. I was talking about your figures there in items 3 and 4.

Dr. MCCABE. Well, we feel that the coal-to-oil demonstration plant has given us adequate information, and the economical thing to do is to recess it now and report it and say we have reached "this point" in

this research. These other laboratories have brought on new processes, but we are not ready to put them in demonstration.

Mr. BUDGE. What does industry contribute toward this program, if anything?

Dr. MCCABE. Industry is doing a great deal of research on its own and we have had a good maintenance and technical liaison with the industry on it.

Mr. BUDGE. They contribute nothing in money or services to the Government program?

Dr. MCCABE. I do not think there has been any money contributed, certainly nothing appreciable. However, some of the companies have supplied technical manpower to help the Bureau at Rifle, and the industry has spent lots of money in studies of costs of synthetic liquid fuels. We supply industrial concerns with shale and shale oil and they report the results of their research to the Bureau. Several years ago, we supplied Carbide & Carbon Chemicals Corp. with tank carload of hydrogenated oil from Louisiana, Mo., and they did a lot of research on that, and of course, they have built a plant at Charles Town, W. Va., to make chemicals from coal.

Mr. BUDGE. In view of the excellent way in which the Bureau has chartered the course here for industry and the fact that the Bureau has demonstrated that you can compete commercially—within less than 2 cents I believe, on the price of gasoline, do you not feel that industry would continue this program, whether the Bureau did or not?

Mr. FORBES. We certainly hope they will. We are encouraging them in every way to do that, but we should not stop our studies short of the goal.

Dr. MCCABE. Here is the point on that: Assuming you might have another 10 or 15 years before you got into real difficulty in petroleum production, there is not going to be a great deal of effort put on that by industry until they begin to get a shortage, and as long as we can import cheap oil from the Near East, there is not much justification for excessive spending in research, but in the interests of security, we should keep our basic research going.

Mr. BUDGE. I am inclined to think from the testimony before the committee here today that your oil shale program is certainly very near the point where industry would take it over, if the Bureau stepped out of the picture, and if any cuts are to be taken here, this $2 million item, it strikes me that we are probably taking it at the wrong place.

IRON

Mr. FENTON. All right, we will resume the minerals and metals.

Will you briefly explain the increases for iron?

Mr. ZINNER. The increase under the iron item is essentially to permit more emphasis on two activities. One has to do with upgrading siliceous ores of the Alabama fields and the other has to do with the utilization of low-grade resources of the Lake Superior region. The Bureau has not maintained an iron program consistent with the size of the supply problem. That fact was developed, again through this programing procedure that I just described. What we intend to do now is to place more emphasis on research, particularly on the nonmagnetic fractions of the taconite in Minnesota. That is

not the same material that industry is now principally concerned with.

Mr. FORBES. Just one other addition to that, Mr. Zinner. There are hundreds of millions of tons of siliceous and off-grade ores in the Birmingham district and part of this money will go toward the process to reduce that silica content so it can be used in the furnaces.

Mr. ZINNER. I wanted to bring out that the high-grade, direct-shipping ores that are mined from open pits in the Lake Superior region are fast being depleted and these taconites are going to be our principal source of domestic iron someday. We certainly should continue with our investigation and research work and encourage others to work in connection with making them useful for furnace purposes.

Mr. Chairman, we have several pages of comments on each of the major areas of effort under this iron program, if you would care to have them.

Mr. FENTON. Yes, we would.

Suppose we put that in the record at this point.

(The matter referred to follows:)

IRON PROGRAM IN THE LAKE SUPERIOR REGION

United States iron-ore requirements for domestic use are expected to reach 130 million gross tons this year and approach 150 million tons annually by 1960. The Lake Superior district, with mines in Michigan, Minnesota, and Wisconsin, is expected to supply about 100 million tons per year of these requirements, and thus continue the drain upon the remaining high-grade easily mined reserves. By 1960, these reserves will have been depleted to the point where forced reduction of output will have begun. Thereafter, it is extremely doubtful if the increasing output of concentrated ore will keep pace with the decline in the output of direct-shipping ore. Industry is constructing facilities to produce magnetic concentrates from Mesabi taconite, but total capacity now planned is less than 15 million tons of concentrates per year by 1960. The prospect is one of increasing dependence upon imported ores.

Recognizing that low-grade iron-bearing deposits in the Lake Superior district constitute a reserve that must be depended upon as the backbone of domestic supplies within the foreseeable future if excessive dependence upon imported ore is to be avoided, the Bureau plans a concerted effort to advance the technology of iron-ore beneficiation. Current industry plans for the production of taconite concentrates are based upon a small segment of the iron-bearing formation. Only the magnetic taconites, and of these only the most accessible ore bodies containing the largest particles of iron minerals, are scheduled for production. Although this portion is of a magnitude sufficient to support a large production, it represents less than 10 percent of the mineable iron formation. Estimates indicate 5 billion tons of crude magnetic taconite from which 1.8 billion tons of 60 percent concentrates can be produced. Including the extremely fine-grained magnetic and nonmagnetic taconites, the estimated tonnage exceeds 60 billion tons of crude material containing at least 15 billion tons of iron. These figures look as large now as did the original estimates of high-grade ore on the Mesabi. However, the iron must be made available, which is neither a small nor simple task. The problem is complex and involves fundamental research as well as pilot-plant operations. It extends from investigations of the ore bodies and mining methods through beneficiation and smelting processes.

Bureau scientists and technicians have undertaken this work backed by wide experience including many years of research in cooperation with the mines experiment station of the University of Minnesota (present methods of magnetic taconite treatment have evolved from this work). Future plans call for an expanded attack commensurate with the magnitude of the work to be done and the gravity of the problem. Duplication of industry effort will be avoided, but emphasis will be placed upon minimizing the growing dependence upon non-domestic sources. This can best be effected by improving the technology of

iron-ore production and treatment which, in turn, will narrow the economic margin between treated domestic ores and imported high-grade ores.

Attention will be given to such aspects as blasting techniques for fragmentation of the extremely resistant taconite, ore-handling methods to reduce equipment wear and breakage, diamond core-drilling to increase knowledge of reserves, laboratory experiments on the application of known concentration methods as well as basic studies of related physics and chemistry, pilot plant operations to prove the feasibility of laboratory developed processes, and smelting tests to determine advantages obtained through prior treatment of the ore.

Other domestic sources of iron are highly important and will receive proportionate attention. However, it is the Lake Superior district that offers the greatest promise of minimizing the Nation's growing dependence upon foreign iron ore. The problem is of great scope and many ramifications; funds will be required greatly in excess of those made available for this purpose in the past. It is apparent, nevertheless, that supplying the Nation's most basic manufacturing industry is of sufficient importance to justify extraordinary effort.

Iron Program in Western States

Western States.—The industrial growth of States west of the Mississippi River, excluding the Lake Superior region, demands that adequate iron-ore supplies be made available for expansion of iron and steel output. Deposits in California, Texas, Utah, and Wyoming are supplying current requirements. However, these deposits plus numerous others of varying size and quality can contribute more and better iron ore.

East Texas, Arkansas, and Missouri have a multitude of scattered brown ore surface deposits. It is not known what tonnage is encompassed in the area, nor except in a few cases, how the ores will respond to beneficiation methods. Hitherto, the small size of the individual deposits has discouraged most attempts at exploitation. Yet, some of these and similar deposits in other areas are becoming active. The importance of these iron-ore sources should be evaluated and tests applied to determine under what conditions they could contribute significant tonnages to the supply.

Similarly, in virtually all of the States west of the Mississippi River are known occurrences of iron ore that have not been investigated nor evaluated as a reserve tonnage. Recent Nevada iron-ore production illustrates the potential of these numerous small deposits. In response to a demand for export to Japan, 9 relatively small deposits produced approximately 800,000 tons of ore in 1952. Four of the properties had been investigated by the Bureau of Mines and the published reports were influential in bringing about exploitation. Much larger deposits in Montana, Oregon, and Washington await suitable conditions, both economic and technologic, in order to become active producers. Most of the deposits contain constituents that make them undesirable in varying degree for the manufacture of iron and steel. But steel is being made from ores that would have difficulty finding a market among eastern furnaces, and the ore producers are beginning to appreciate the advantages of ore beneficiation.

One of the factors having great weight against increased output of iron and steel in Western States is the large unit size necessary to support competitive smelting. Modern blast furnaces in Texas, Colorado, Utah, and California supply large areas parts of which could best be served by smaller units producing quantities of iron and steel that would be uneconomic under present practice. For example, the Puget Sound area in the State of Washington is a growing industrial center that must obtain its iron from the above furnaces and by water from eastern furnaces. A local iron furnace producing less than 100 tons per day would provide great savings to local consumers and a stimulus to industrial growth. Furnaces producing 25 tons per day of competitively priced iron would stimulate growth in a number of other areas. Moreover, many iron ore occurrences of the Western States are of a size and quality to support numerous small operations better than a large integrated industry.

Industrial expansion can be greatly assisted by research to determine the feasibility of smelting practices designed to operate in smaller producing units. When hydroelectric developments proposed for the Northwest are built, electric furnace pig iron stands a favorable chance for commercial production. In general raw materials are available in a number of localities, but not in quantities adequate for an integrated steel industry of proportions now considered normal. Bureau of Mines tests and experiments to adapt methods to special conditions will include electric furnace smelting runs at the Bureau's Electrometallurgical Experiment

Station, at Redding, Calif., beneficiation tests on various iron ores to determine the most suitable treatment methods, and economic studies to determine favorable conditions in various areas.

Iron Program in Eastern States

Eastern States.—Iron-bearing deposits throughout the Appalachian Mountain system have supplied iron ore since colonial times and continue to produce important tonnages for current consumption. The ores include all commercial iron minerals generally grouped under the four varieties known as hematite, magnetite, carbonate, and brown ore. Southeastern red ores (hematite) account for the largest production and come from the Clinton formation which is of commercial grade and thickness only in the Birmingham area. Magnetite is produced in New Jersey, New York, and Pennsylvania; and brown ore in Alabama, Georgia, and Tennessee.

Many deposits that were productive prior to the opening of the Lake Superior region became unprofitable to operate at that time, and only recently have the northeastern magnetite deposits regained an output of important proportions. Birmingham red ores remained commercial because of their lime content and proximity to coking coal and limestone deposits; brown ores have enjoyed only intermittent activity. In any event, these sources of iron ore will continue to have a place in the supply pattern. However, the magnitude of their contribution will be according to the intensity of demand and assistance supplied in the form of advanced technology.

Bureau of Mines experiments have indicated that beneficiation of red ores now consumed without treatment can increase materially their performance in the furnace and probably at a justifiable cost. Perhaps more important, however, these experiments have pointed the way to eventual utilization of the noncalcareous iron-bearing beds including sandstones of about 25 percent iron content. It is hoped that this work soon will result in a modification of mining practices that now threaten to make some of these potential ores unavailable. Estimates of the quantity of red ores and sandstones in the Clinton formation have been made only in the Birmingham area, but the formation extends, almost continuously, north from Alabama into New York. In many areas, the beds are too thin to justify underground mining and in other areas the ore is of subcommercial quality. However, these reserves of potential ore eventually will yield to exploitation as technology advances and demand for iron ore increases.

The Bureau proposes to continue its work on the beneficiation of the nonmagnetic eastern ores, and to increase its knowledge of reserves of all the potential ores through deposit investigations. Beneficiation studies will include experiments on various methods of grinding and abrasion in order to improve the liberation of iron minerals from gangue minerals, the development of inexpensive flotation reagents that will permit a satisfactory separation of the iron oxides, and the application of various methods to the characteristics of particular ores.

Mining investigations will include diamond-core drill holes aimed at locating extensions of presently known deposits, and examinations of new deposits in known iron-bearing areas.

MANGANESE

Mr. Fenton. Your next item is on manganese, $322,727. Do you have an explanation of that?

Mr. Zinner. Yes, sir. In 1952 we asked for a reduction in the amount of money to be spent on manganese to permit time for a sound analysis of the results that had been obtained in the laboratories and for some tooling-up of pilot-plant facilities.

The increase requested in this present presentation is to permit the facilities that have been created for manganese research to operate on a year-round basis. There has been no lessening of the manganese problem. From an analysis of statistics it might appear that we are rapidly going backward. When we came to you some 10 years ago, and justified manganese research on the basis of the fact that we were producing only about 10 percent of our requirements from domestic sources, I am sure it sounded quite serious. If we

made the same presentation today, you would find that we are only producing 7 percent of our requirements from domestic sources.

Mr. FENTON. Mr. Zinner, in the hearings last year there was testimony on page 366 to the effect that manganese research "had reached the point where we think a great expenditure is no longer necessary." You are now asking for a $323,727 increase.

Why have you changed your mind about this?

Mr. ZINNER. Mr. Chairman, I think we have changed our mind once every 2 years since the Bureau has been involved in manganese research.

Mr. FENTON. That does not mean as Mr. Budge suggested this morning that one year you come in for decreases and leave the others out and then the next year you reverse the process, does it?

Mr. ZINNER. The last decrease took place at a time when we felt possibly we had achieved more than we now realize we have achieved. It is my feeling that we have a long way to go before we can state, with any degree of assurance, that we could meet our manganese requirements entirely from domestic sources, under extreme emergency conditions.

Mr. FENTON. Of course, we do not have very much domestic manganese. About 93 percent is imported, is it not?

Mr. ZINNER. That is true as of the moment, but we have tremendous resources of low grade manganiferous material in this country, adequate in terms of units of manganese, to meet our normal requirements for many years.

There is one other element that has changed this current supply picture, and that has been the very recent increase in steel capacity of 20 million tons or more. That has aggravated the manganese shortage by a proportionate amount.

Mr. FENTON. I certainly think it is a very vital element in our economy. I just noted what you said last year, that you had reached the peak.

Mr. ZINNER. So far as potential resources are concerned, I would estimate that the reserves in Maine, Minnesota, South Dakota, Arizona, and elsewhere, are quite adequate in terms of total units of manganese to supply our emergency requirements if we have well documented technology on the books that can be brought into play under a variety of emergency conditions.

Mr. FENTON. Will you offer for the record, your prepared statement on manganese?

Mr. ZINNER. Yes, sir; we will be glad to.

(The matter referred to follows:)

MANGANESE

The Boulder City station has been engaged in a project to produce usable manganese products from low-grade materials at Artillery Peak. The completion of a pilot concentrator and a hydrometallurgical pilot plant in 1951 and 1952 was made possible by a special appropriation late in 1950.

The concentrator was run steadily for 9 months until July 1952, intermittently since, accumulating data and making changes in the process. Laboratory work at Salt Lake City made possible the development of an oil-emulsion float which has been tried at the plant with success and found to be more tolerant to the use of recycled water. It has been possible to obtain a 35 percent product with an 83 percent recovery.

The hydrometallurgical plant has operated on the middlings from the concentrator employing a dithionate leach. This process has been successful and a high-grade manganese dioxide has been produced. By combining the hydrometallurgical product with the 35 percent concentrates, a plus 48 percent Mn nodule can be produced. Uncombined, these products could be used in the metallurgical industry and in the battery or chemical industries.

Although this project has been technically successful, additional work is being planned to improve efficiency and reduce cost. Completion of the hydrometallurgical data will permit cost estimates to be made to determine the conditions under which the process will be economic.

In the future, it is planned to operate the plant on lower-grade Artillery Peak material as well as other low-grade domestic materials. The sample shipped to Boulder City from the Cuyuna range is on hand and will be processed in the near future.

Electrolytic manganese was developed at Boulder City and the process is now used commercially with great success. Matte smelting of low-grade manganese ores has been investigated and has been found feasible with possibly favorable costs if a plant were to produce manganese, crude iron, and sulfuric acid. The nitrogen dioxide leach process has been investigated from which it is possible to produce battery-grade manganese dioxide.

Cooperative agreements, with Manganese, Inc., Combined Metals Reduction Co., and Western Electrochemical Co., have contributed to the establishment of three plants producing, or on the verge of producing, domestic manganese. The extent of this contribution to the total supply is not definitely known as yet, but should be appreciable within the next year. Some of these agreements are still in effect and a cooperative attack on future problems is anticipated.

RECOVERY FROM OPEN-HEARTH SLAGS

The recovery of manganese from open-hearth slags has been investigated both by pyrometallurgical and hydrometallurgical methods as a cooperative project with the American Iron and Steel Institute.

Pyrometallurgical

The purpose of the research is to recover a ferro-grade product from the manganese-bearing tap and flush slags from open-hearth furnaces. This has been accomplished by smelting the raw slags to recover the contained metals in a phosphorus rich spiegeleisen, then separating the iron, manganese, and phosphorus by means of selective oxidation.

This work has produced a synthetic manganese ore ranging from 54 to 62 percent Mn, dependent upon its nature, from which a standard grade of ferromanganese can be made. The higher manganese ranges, while lower in silica, have entrapped inclusions of high-phosphorus iron which can be magnetically removed. Work is now underway to develop as coproducts a high-grade steel-furnace melting stock and a phosphorus fertilizer.

It is estimated that full application of this process to recover manganese from open-hearth slags could supply half the United States current industrial manganese demand from the immense reserve of manganese-bearing slags now available in dumps and currently being produced. Much of the slag production has heretofore been discarded as a waste product.

To date, this process has been proclaimed to be technically feasible by the Bureau and the American Iron and Steel Institute. On the strength of this expression of opinion, DMPA has contracted for the construction of a semicommercial size plant to check the economic practicability of the process.

Meanwhile, work, is continuing in the Bureau of Mines to establish standards of operation and to improve and refine procedures to maximum efficiency points. Considerable amounts of data are being compiled and examined for this purpose.

Hydrometallurgical

The purpose of this project is to recover a ferro-grade product from open-hearth slags by hydrometallurgical methods. By reducing a lime-clinker of the slag with hydrogen and then leaching the manganese by means of ammonium carbonate to precipitate the manganese in the form of a carbonate, recoveries of 80 and 85 percent Mn have been attained in the laboratory and 80 percent in the pilot plant.

This project is still in the experimental stages wherein the factors affecting the operation of the process are being determined and measured. The interrelation of the sintering, reducing, and leaching steps has been found to be extremely close

and although tests indicate that high recoveries of manganese are possible, experimentation continues at both laboratory and pilot plant levels in an effort to obtain optimum results.

CUYUNA RANGE

Research has been under way to recover a ferro-grade product from the manganese-bearing carbonate slates and the lean brown and black manganiferous oxides of the Cuyuna range. The project has been directed along lines of a sulfur dioxide-air roast to convert the manganese to a water soluble manganese sulfate.

This project has progressed to the point where it has been established that by pelletizing and calcining the raw ore, it is possible to accomplish sulfatization in a pilot plant shaft furnace. This furnace, completed in late 1952, has been operated on successful campaigns and it has been possible to date to accomplish partial sulfatization of the manganese in the feed.

Future work on the project will consist of controlling the temperature of the furnace when in operation so that the manganese may be more efficiently sulfatized while holding the production of iron sulfate to a minimum. Ores have been shipped to Boulder City, Nev., for future treatment in the flotation-leaching pilot plant.

Other projects in regard to the Cuyuna range include mineral dressing studies aimed at developing an efficient method of beneficiating manganiferous ores by grinding, flotation, and other mechanical means. Work is being completed on section maps of the Cuyuna range preparatory to the plotting of drill holes with the objective of completing a Cuyuna range atlas.

AROOSTOOK COUNTY, MAINE

The project is to develop the reserves of manganese material in the Aroostook County area in Maine by exploration, drilling, trenching, mapping, etc., and to obtain representative samples for metallurgical testing and to develop a feasible process for the extraction of manganese from the material.

The first phase of this project has been virtually completed and reserves have been established at approximately 250,000,000 tons of material containing +9 percent Mn. Samples have been provided for metallurgical testing.

Since there appears to be a great deal of similarity in analysis between Aroostook material and open-hearth slag, samples from the deposit have been substituted for slag in both the pyrometallurgical and the hydrometallurgical processes. This has been successful, on the whole, with minor variations in the process. A severe economic problem remains, however, due to the relative inaccessibility of the ores to consuming areas as compared to open-hearth slags.

Attention is also being given to the development of other processes for the extraction of manganese. These projects are at present on a laboratory scale. Research is being done on leaching Aroostook material with dilute sulfuric acid. At present, attempts are being made to establish the optimum concentration of acid, temperature, and time to obtain the most efficient leach. It is planned to test-roast the material previous to leaching.

Manganese chloride volitalization also is being investigated. Chloridization appears to be feasible and present attention is directed toward the recovery of hydrochloric acid and metallic oxides from the iron and manganese chlorides.

CHROMITE

Mr. FENTON. What is the situation with reference to chromite?

Mr. ZINNER. We are in a similar position there, although we feel that some of the knowledge which has been gained in manganese research is applicable to chromium and has permitted a rather rapid progress. I think we are reaching a point in our chromium situation where we could conceivably meet our minimum requirements from domestic sources.

Mr. FENTON. Do you think we have reached that point?

Mr. ZINNER. I do feel we are almost there. During the past year, particularly, there have been substantial gains through chromium research. There is another problem there related to the use of domestic resources that would require revisions in industry practices.

Instead of setting specifications that are very difficult to meet, I think that industry itself might find that they can use an inferior material or materials with less rigid specifications to produce a quite satisfactory end product.

Mr. FENTON. Well, we hope that is right. You make a statement here in the justifications that all but a small portion of the Nation's requirements for chromium is supplied by distant overseas sources?

Mr. ZINNER. That is true as of the moment. That is exactly the thing we hope to overcome, particularly in the event of an emergency.

Mr. FENTON. Will you offer for the record your prepared statement on the subject of chromium?

Mr. ZINNER. We will be glad to.

(The matter referred to follows:)

BOULDER CITY, NEV.

The Boulder City, Nev. station of the Bureau of Mines has installed a roll-type briquet press for the briquetting of chromite ore, and is investigating briquetting procedures with a view toward eliminating the use of a binder which would tend to dilute the chromite. Briquets are currently necessary in the making of ferrochrome if lump ore is not used. Five percent molasses has been found to be a suitable binder. When the concentrates and binder were mixed and allowed to stand for 1 to 1½ hours before briquetting, the resulting briquets were extremely resistant to impact and abrasion. Investigation of various concentrate grinds and curing temperatures is being carried on.

Research has been conducted on the purification of chromic acid produced from calcium chromate and sulfuric acid. Tests demonstrated that a product with less than 0.3 percent impurities can be obtained if several recrystallization steps are followed by molten filtration of the chromic acid. A pure acid can also be made without recrystallization if enough previously purified chromic acid is recycled to limit to 10 percent the impurities in the material going to molten filtration.

Tests are under way to determine the most feasible method for making calcium chromate directly from Montana (Mouat) chromite concentrates and limestone. It is thought the calcium chromate might possibly be used as a binder for chromite briquets and as a base for the manufacture of other chemicals. For these tests, a Globar hearth furnace is being used. The furnace is set at about 900° C. and limestone and chromite concentrates in varying proportions are roasted for varying lengths of time. Preliminary observations indicated that a CaO to Cr_2O_3 ratio of 3:1 roasted for 8 hours would present optimum results.

PITTSBURGH, PA.

Efforts to utilize untapped sources of chromium are being made at the Bureau's Pittsburgh, Pa., station, where the recovery of the metal from chrome-bearing iron ores is being investigated. Lateritic ores such as are found in the Northwestern States, Cuba, and the Philippines appear to be the only ones with sufficient chromium content to justify the investigation; economic recovery can be accomplished only if the contained nickel, iron, and possibly cobalt are also recovered. Industry is cooperating in the furtherance of this goal.

It was planned that preliminary experimental work would involve the making of selective oxidation tests in a basic converter in order to produce a high chromium slag from iron-chromium alloys. In a series of tests made on the oxidation of carbon from chromium-bearing pig iron, the metal was blown in the electric furnace with pure oxygen, an iron pipe being used as a lance. The initial metal contained about 6 percent chromium and less than 0.4 percent silicon; the carbon was oxidized from 4.5 to 0.1 percent with very little chromium loss at operating temperatures of 3,100° F. At 0.07 percent carbon, the chromium content of the metal was about 3.5 percent. Thus, it is evident that low-carbon steels containing several percent chromium can be produced by blowing low-silicon, chromium-bearing pig iron. When oxygen-enriched air was blown into the metal in similar tests made in a 500-pound basic converter, the carbon content of the metal was over 1 percent when the chromium content was at 3.5 percent, instead of the 0.7 percent contained carbon when pure oxygen was used in the electric furnace.

Tests run to determine the reason for the difference indicated that a change in operating temperatures was the cause. Electric furnace oxidation temperatures ranged from 3,000 to over 3,200° F. while oxidation temperatures in the converter ranged from 2,700 to 3,100° F.

The M. A. Hanna Co. and the Washington Steel Corp. engaged in cooperative projects with the Bureau. The M. A. Hanna Co. project sought to increase the nickel content of ferronickel by the selective oxidation of iron in a basic converter. This project was successfully completed and it was indicated the method might be used in the recovery of nickel from the Riddle deposits in Oregon.

The aim of the Washington Steel Corp. project is to produce commercial grade stainless steel from the Cuban lateritic ores, as well as nickel and chromium oxides. The metals will be extracted by selective reduction.

Production of Chromium Alloys From Low-Grade Concentrates Albany, Oreg.

The Bureau of Mines is engaged in research to evolve smelting and metallurgical processes which will make the use of the large but low-grade chrome deposits such as the western beach sands and the Stillwater complex, Montana, economically feasible. Concentrates from these deposits are not only low in chromium content, but have a low chrome-iron ratio and a pulverulent state, currently making them undesirable for use in the manufacture of standard ferrochrome, which consumes a major portion of the available chromite ore. Pyrometallurgical experiments being conducted by the Bureau at Albany, Oreg., will lead to the successful production of usable ferrochrome and other chromium alloys from these offgrade ores. Additional research activities include the quest for better methods of making ductile chromium metal, and investigation of the preparation and properties of various chrome-alloy bases.

In the numerous smelting tests being made on Montana (Mouat) concentrates, there has been a systematic attempt to determine the precise quantity of each variable to be used. The optimum basicity of slag for satisfactory furnace operation is being ascertained. The correct percentage of stoichiometric carbon and the proper proportions of hogged wood waste and coal composing the carbon for reduction of a maximum of the chromium and iron content of the ore are being sought. The proper amount of silica flux, if any, and the correct power input are other factors being determined.

In investigations on chromium-base alloys, it has been found that the higher the molybdenum content in a chromium-molybdenum alloy, the less satisfactory the rolling. It was also determined that chromium-titanium alloys are not amenable to precipitation hardening up to 1,200° C.

In the fabrication of arc-melted chromium ingots, it has been found that quartering the ingots vertically and making a 40 to 60 percent reduction in thickness by a single forging blow at 1,000° C. will overcome the center weakness of the ingots. The resulting metal slab is sheath rolled to yield a sixteenth of an inch-thick sheet, which can be rolled in air at 800° C. to yield a uniform sheet 0.014 inch thick. Bending tests on the air-rolled sheet indicate that as-rolled sheet will present the maximum strain rate, that there is a lack of ductility in recrystallized sheet, and that bending transverse to the rolling direction is unsuccessful. In these last respects, chromium is similar to tungsten and molybdenum.

FERROALLOY METALS

Mr. Fenton. Your next item is on ferroalloy metals generally.

If you have any further explanation on the manganese which you would like to make orally, before we go into this, you may do so.

Mr. Zinner. In the documents which we offered on manganese, there is an explanation of the work that is being done at Boulder City pilot plant, which is one plant that came into being as a result of the supplemental appropriation for manganese operations. We thought the committee would be interested in that. We submitted a statement on the status of the recovery of manganese from open-hearth slag, which was touched on this morning. There is also a short statement on manganese in Minnesota, which we feel is one of the major potential sources. All of that has been submitted.

Mr. FENTON. Put in a statement about the ferroalloy metals and the increase you are asking for. That takes in tungsten, nickel, cobalt, and so forth.

Mr. ZINNER. I might point out, Mr. Chairman, that through the process of the evaluating program procedure this item ultimately came to the top as one of our highest priority efforts, and it is the part that we wish to particularly emphasize this year. The part that consumes most of this increase is the nickel problem.

Mr. FENTON. Yes.

Mr. ZINNER. I feel that there are areas where we might, from either domestic sources or sources close to our own shores, produce a sufficient quantity, at a reasonable cost to meet and reverse this continuous and embarrassing nickel shortage.

Mr. FENTON. All right, sir.

What volume do you have there to put in on that?

Mr. ZINNER. On nickel?

Mr. FENTON. Yes.

Mr. ZINNER. Just 3 or 4 pages.

Mr. FENTON. All right.

(The matter referred to follows:)

HYDROMETALLURGY OF TUNGSTEN

Tungsten ore as mined contains only 0.3 to 2 percent tungsten trioxide and must be beneficiated to produce a concentrate containing at least 50 percent, and preferably 60 to 75 percent tungsten trioxide. These tungsten-bearing concentrates also must be relatively free of objectionable impurities that are commonly found in many tungsten ores.

The present practice is to crush and grind the tungsten ore, concentrate the tungsten minerals by gravity or flotation followed in some cases by hydrometallurgy. As a general rule high-grade concentrates can be produced by gravity methods at moderate costs for milling, but much of the tungsten is lost in the tailings. A high recovery can be obtained using flotation methods but the grade of the concentrates produced is often found to be unsatisfactory. A combination of the two methods is used at several plants. Low-grade concentrates produced by flotation methods are often sent to digestion plants where the tungsten is dissolved and reprecipitated as a very pure, very high-grade product. This method gives the best overall recovery but the costs are high and at present there are only two digestion plants in operation. Freight rates from many mines to either of these plants are an important factor.

Past research of the Bureau of Mines has assisted the development of techniques used in the metallurgy of tungsten. The present emergency has led to a great increase in the demand for tungsten, and to the mining of ore deposits much lower in grade than those worked in prior years. Metallurgical practices developed for ores containing 1 percent tungsten trioxide have not been satisfactory for ores containing only 0.3 percent. The tailings from some ores milled during World War II contained more tungsten per ton than many ores now mined. In order to provide data needed for present-day operations additional investigations must be completed.

The Bureau of Mines will conduct research designed to provide information on the best method to use to treat a specific type of ore. The program will also include studies of improved methods of hydrometallurgy, with special stress on lowering costs of both the original plant and the treatment of the ore.

The result of this research program will be information that can be used by the mining industry to improve present practice. This will be of particular value to the many new firms now engaged in tungsten mining, but it will also be useful to all branches of the industry. The increased recovery will be of particular importance from a conservation standpoint.

CLE ELUM, WASH., NICKELIFEROUS DEPOSITS

Drilling has shown a reserve of 6,250,000 tons of ferruginous material containing 40.86 percent Fe, 0.84 percent Ni, and 2.40 percent Cr^2O^3, underlain by serpentine containing 0.63 percent Ni to an average depth of 21 feet. The iron deposits are subdivided into 3,200,000 tons of measured material, 650,000 tons of indicated material, and 2,400,000 tons of inferred material. Much of the material could be recovered only by underground mining, although as much as 1,000,000 tons might be removed by open-pit methods.

The Bureau of Mines has been conducting tests on Cle Elum ore to produce chrome-nickel alloy pig iron.

NICARO, CUBA

The Cuban laterite offered the best opportunity to augment the world supply and in 1942 the United States Government built a plant at Nicaro, Oriente, for extracting the nickel. The plant was closed in 1945 and rehabilitated in early 1952. It has a capacity of about 30 million pounds of nickel annually from 1 million tons of ore.

The United States Government owns no ore reserves to supply the Nicaro plant. Ore currently is being mined from deposits owned by the Freeport Sulphur Co.

In February 1952 the Defense Materials Procurement Agency requested the Bureau of Mines to conduct an investigation of the laterite-ore reserves of Cuba and other Caribbean countries (1) to ascertain if sufficient ore reserves were available to double the present capacity of the Nicaro plant, or (2) to ascertain if reserves existed elsewhere in the Caribbean for a plant of similar size to be built on the Gulf coast of the United States. Accordingly, in June 1952 a Bureau mining engineer and a Survey geologist went to Nicaro. Two other Bureau mining engineers and two chemists were sent in August.

Because of delay on the part of DMPA in getting options on ground to be drilled in Cuba, the go-ahead was not given to the Bureau until September 8; drilling began September 15. By the end of October 124 holes had been drilled to explore an area 1,000 by 2,000 meters. A preliminary estimate of the ore developed by the drilling to the end of October is 1½ million tons of plus 1 percent combined nickel and cobalt on the Zoilita denouncement.

A base camp for 80 men has been established on an area cleared on the shoulder of the mountain.

FREDERICKTOWN, MO.

The complex lead-copper-nickel-cobalt deposits at Fredericktown, Mo., contain indicated developed reserves of nearly 2 million tons that carry about 2.3 percent lead, 1.4 percent copper, 0.28 percent cobalt, and 0.46 percent nickel. Inferred reserves amount to several times this figure. Treatment of the ore involves differential flotation producing three concentrates: Lead, copper, and iron-nickel-cobalt.

The iron concentrate contains about 50 percent of the cobalt and nickel in the ore. An additional 20 percent of the cobalt and nickel is floated with the copper concentrate.

Many attempts have been made by several companies to establish a regular production of cobalt and nickel at Fredericktown, Mo., and despite the fact that large sums have been spent in these endeavors, none of the metallurgical processes developed for treating the complex ores proved entirely satisfactory; consequently, there has been only sporadic output. Although a process for the recovery of the cobalt and nickel in the iron concentrate is reported to have been perfected, much of the cobalt and nickel contained in the ore will not be recovered. Recovery of this cobalt and nickel would serve a twofold purpose—conservation of important resources and make available much needed production for the defense program.

Investigations dealing with the recovery of cobalt and nickel from the ore and concentrates from southeastern Missouri have been continued by the Bureau of Mines.

In carrying out these studies, a weighted composite of the iron and copper concentrates was made which contained 33.1 percent iron, 2 percent cobalt, 2.96 percent nickel, and 12.7 percent copper. This material was roasted for 3 hours at 700° C. to produce a calcine containing 5.9 percent sulfur, which was partially reduced in two stages. This treatment produced (1) a final slag containing 80 percent of the iron, 5 percent of the cobalt, 3 percent of the nickel, and 2.5 percent of the copper; (2) an alloy analyzing 2.5 percent iron, 3 percent cobalt, 18 percent nickel, and 60 percent copper and containing the following

percentages of the total—iron 1, cobalt 16, nickel 67, copper 57; (3) a second alloy analyzing 55 percent iron, 18 percent cobalt, 6 percent nickel, and 17 percent copper and containing the following percentages of the total—iron 18, cobalt 74, nickel 15, and copper 11; (4) a small matte layer amounting to 8 percent by weight of the products and analyzing 3 percent iron, 1.5 percent cobalt, 8 percent nickel, and 63 percent copper and containing the following percentages of the total—iron 1, cobalt 5, nickel 15, and copper 30.

Experiments are being performed to separate iron and cobalt, nickel and copper in a mixed concentrate formed by blending an iron and copper flotation concentrate on a mill-weight ratio. Concentrates from the National Lead Co. at Fredericktown, Mo., are roasted to form some water-soluble sulfates of cobalt, nickel, and copper and nonwater-soluble oxides of iron, cobalt, nickel, and copper. The roasted material was hot-water leached.

The solids were dried, then fused at 1,400° C. with SiO_2 and coke. The products consisted of a slag, a metal, and a small amount of high-copper matte. The slag was ground, mixed with more coke, and remelted to produce a second metal and a final slag. The final slag contained more cobalt than desired. Experiments will be made in which reducing conditions are intensified by the addition of larger quantities of coke. By this means the cobalt should be lowered in the slags and the iron and cobalt content of the metals raised.

In another phase of the work on Fredericktown material, improved extractions of cobalt, nickel, and copper have been achieved by treating pyrite concentrates with gaseous chlorine at temperatures below 100° C. under a slight pressure, followed by distillation of the sulfur chlorides at 245° C. and oxidation of the iron chloride at 450° C. Aqueous extraction of the treated material dissolved 95 percent of the cobalt and nickel, 93 percent of the copper, and only 7 percent of the iron.

RIDDLE, OREG., NICKEL ORE

The Riddle (Oreg.) deposit is particularly representative of the better-grade silicate ores in the United States. The deposit was sampled systematically and mapped geologically in 1940 by the United States Geological Survey. In 1942 and 1943, it was extensively drilled by the Freeport Sulphur Co. Later, the Hanna Development Co., Cleveland, Ohio, has been doing exploration, and the Bureau of Mines has conducted pyrometallurgical tests at Albany (Oreg.), to develop a low-cost electrosmelting process to yield ferronickel.

Favorable results of the work by Hanna Development Co. and the Bureau of Mines has led to signing of a contract between Hanna and DMPA to install three electric furnaces to produce ferronickel from the Riddle ore. Planned production will be at an annual rate of 6,900 short tons, and first production is expected in 1954. Thus, the establishment of a nickel-producing industry in Oregon will not only be important to the State, but to the Nation, which has no primary nickel production.

About 162 acres of the Riddle ground are underlain by a blanket containing over 6 million tons of material with 1 to 2 percent nickel. More recent explorations have increased appreciably the tonnage of proved and probable ore of different grades. In addition, there is a large tonnage of the soil layer containing 0.5 to 1.5 percent nickel. The deposit is favorably situated for the low-cost handling of mined material.

The Bureau of Mines began the first phase of the smelting of 250 tons of Riddle ore on February 3, 1952. This phase explored several charge variables and developed optimum power conditions. Ten charge variables were tested in the 14-day test. The results of the exploratory phase of this test work were satisfactory.

The second phase of the smelting project was completed in March. Four charge variables were tested and sufficient metal produced to provide ferronickel for full-scale utilization heats by a commercial firm in the East. The metal produced was placed into three main groups: 9 percent Ni, 7 percent Si, 25–30 percent Ni, and 40–50 percent Ni. Five half-ton melting and refining heats were made on this metal in the ST Lectromelt furnace.

Melting, refining, and pigging of the ferronickel products were completed in April with six heats in the electric furnace. The primary objective of refining was to lower phosphorus and sulfur contents to acceptable figures.

The Electric Steel Foundry Co., Portland, Oreg., made 2 arc furnace and 1 induction furnace heats using ferronickel produced during the smelting project.

All three heats produced stainless steel with the major portion, or all, of the nickel being derived from Riddle ore. The company reported that the ferronickel was a very satisfactory form of nickel and was just as easy to use as the usual pure nickel squares.

The Hanna Development Co. has chosen the Bureau of Mines method of producing 25 percent ferronickel.

MAINTENANCE, BUILDINGS AND FACILITIES

Mr. FENTON. What do you have to say about this maintenance, buildings and facilities item?

Mr. ZINNER. These are the items that support the rather large facilities that the minerals and metals research programs require. We have about 20 stations throughout the country where minerals and metals research is being undertaken. At the end of each of the commodity activities you will find an item for buildings and facilities. Those are to maintain the stations where the minerals and metals work is being done.

Mr. FENTON. Put a list of those spots in the record at this point.

Mr. RICE. You mean the places where they are, Doctor?

Mr. FENTON. The places where you have those facilities.

Mr. RICE. Yes.

(The matter referred to follows:)

The subactivity "Maintenance, buildings, and facilities" appears under each of the activities (*a*) "Ferrous metals and alloys," (*b*) "Nonferrous metals," and (*c*) "Nonmetallic minerals." Funds described under these titles provide for basic maintenance and building upkeep at 20 research establishments where laboratory, pilot plant, or other experimental work is performed as part of the minerals or metals program. Such work is performed at the following sites:

Experiment station, Albany, Oreg.[2 3]
Pilot plant, Bauxite, Ark.[3]
Experiment station, Berkeley, Calif.[2 3]
Experiment station and pilot plant, Boulder City, Nev.[2 3]
Experiment station, College Park, Md.[2 3 4]
Sample identification laboratory, Denver, Colo.[3]
Experiment station, Juneau, Alaska [2 3 4]
Sponge iron pilot plant, Laramie, Wyo.[1 2]
Experiment station, Minneapolis, Minn.[2]
Experimental mine, Mount Weather, Va.[2 3 4]
Experiment station, Norris, Tenn.[4]
Pilot plant, Pittsburgh, Pa.[2]
Experiment station, Raleigh, N. C.[3]
Research laboratory, Rapid City, S. Dak.[3]
Pilot plant, Redding, Calif.[2]
Experiment station, Reno, Nev.[3 4]
Experiment station, Rolla, Mo.[2 3 4]
Experiment station, Salt Lake City, Utah [2 3 4]
Experiment station, Seattle, Wash.[4]
Experiment station, Tucson, Ariz.[3]
Experiment station, Tuscaloosa, Ala.[2 4]

ALLOCATION OF FUNDS IN METALS PROGRAM

Mr. BUDGE. I am rather interested about the way these programs are set up as to particular metals. Is it not true that your research must, of necessity, commingle several metals?

[1] Inactive, scheduled for disposal.
[2] Establishments supported in part by subactivity "Maintenance, buildings, and facilities" under "Ferrous metals and alloys" titles.
[3] Establishments supported in part by subactivity "Maintenance, buildings, and facilities" under "Nonferrous metals" titles.
[4] Establishments supported in part by subactivity "Maintenance, buildings, and facilities" under "Nonmetallic minerals" titles.

Mr. ZINNER. That is absolutely correct.

Mr. BUDGE. Then how did you arrive at your increases? For example, take this big increase on manganese, how did you go about setting that up in the budget?

Mr. ZINNER. Manganese is one instance where we have a minor amount of interrelationship with other mineral commodities. It stands fairly well by itself. We have considerably more difficulty with the ferroalloy elements such as tungsten, molybdenum and nickel. As far as the development of sources, or of beneficiation and treatment of low-grade manganese, is concerned there is little else connected with it and it stands fairly well by itself.

Mr. BUDGE. In most instances you say well, a certain percentage should be charged to one metal, a certain percentage to another, and another to another, and then you add them up, and it becomes about these totals?

Mr. ZINNER. Frequently that is correct. It is difficult to clearly define commodity lines when these programs are assigned to the various research establishments. When a man is working on one commodity he does not close his eyes to the others. Funds are often allotted from these various commodity titles to a station with the understanding that the work clearly contemplates this relationship between commodities.

We have little difficulty in compiling these program statements. We start with an individual commodity with a full understanding that as we progress up the line we keep crossing commodity lines frequently.

I might point out a good utilization illustration of that right here in this selenium research. These three rectifiers are the small television size, but each one of these little flat parts has more than five elements in its structure, aluminum, nickel, selenium, and an alloy made from bismuth, cadmium, and tin, all in one little plate.

Mr. BUDGE. As a matter of fact, with that type of a budget presentation the Bureau can put emphasis on any particular metal it wants to, can it not, without these increases which are specified?

Mr. ZINNER. I think you will find in this particular budget that they tie in pretty well with the commodities to which we have referred here.

Mr. BUDGE. That may be as it should be, but you could put the emphasis on whatever you want to in your discretion. It is a rather novel budget presentation.

METAL IMPORTS

Mr. KIRWAN. Doctor, how many metals or minerals do we have to depend upon securing from the rest of the world, metals or minerals which we do not have in this country?

Mr. FORBES. We are working on about 80, I would say, strategic ones.

Mr. ZINNER. They can change from day to day, and it depends on the way you are looking at it.

If you approach it from the standpoint of the Nation's ability to supply, from within its own areas, the minimum amount to meet normal requirements then there are very few with which we are adequately supplied.

Magnesium would be one outstanding one, in adequate supply of course.

There is no shortage of that. It becomes a question of utilization rather than a supply problem. Probably no more than 8 or 10 would fall into that particular category. The source of the rest of them would be, to a large degree, outside of our own country.

There are a few instances where we have been able to improve the domestic production picture, and that is what we are working for continuously. We have some hope of remedying that situation in the case of a number of others.

Mr. KIRWAN. I think somebody appeared here last year, and I think he said there were 40 of them. What he was saying was so secret that he did not want the rest of the world to know about it.

Mr. ZINNER. I think it would be common knowledge.

Mr. KIRWAN. What?

Mr. ZINNER. I say I think it would be common knowledge.

Mr. KIRWAN. Well, probably it is, but I am just telling you somewhere along the line, some fellow went on to tell the committee about them. There were about 40 of them, and he said we dared not open our mouths about it, that it was highly secret. He worded it that way.

In other words, it is costing millions of dollars to import needed metals for new products and devices. Scientists and men of vision with ability and brains are discovering ways to meet our needs here at home. That is where your agency comes in. You said here early this afternoon that recently you gave our business a metal that you had just developed that you did not know anything about 2 or 3 years ago.

Mr. FORBES. That is right.

Mr. ZINNER. I might point out to you that as soon as this metal begins to come on the market immediately a shortage is built up.

In this case it does not happen to be a shortage of raw materials, but a shortage or production facilities. The defense agencies are concerned and are trying to get responsible interests to expand their capacity for producing titanium. The metal is going into military uses at the present time, but sooner or later when the military needs are satisfied there should be a domestic demand for that particular commodity. It is a job industry itself should be working on.

Mr. KIRWAN. They are bound to be.

Mr. ZINNER. It is a good airframe material, and for uses of that kind. We hope that peacetime use of titanium will come about faster than has been the experience in other metals. Otherwise, as soon as the emergency is over we will experience a shutdown of production capacity or the major part of it. Industry and the manufacturers should have devised the means for using this metal in the normal consumers market. I think that is true in the case of a good many commodities.

BUREAU CONTRIBUTION TO NATIONAL DEFENSE

Mr. FORBES. I think at this point it would be a good idea to tell how we are helping out the military, the Munitions Board, and the Army with respect to titanium at Boulder.

Mr. KIRWAN. This is a thing you want to give this committee, because you are spending that money first for research for national defense.

Mr. FORBES. That is right.

Mr. KIRWAN. It is under the charge of your Department, and you are doing it for another agency of the Government.

Mr. ZINNER. Of course, I think it should be made clear that we are getting substantial funds from the other agencies also.

Mr. KIRWAN. Yes.

Mr. ZINNER. We are getting a little ahead of ourselves, but I guess it is all right.

Mr. FENTON. That is all right; go ahead, as long as it takes in this category.

Mr. ZINNER. There are five companies that are involved in the titanium-production business to a substantial extent. There is a rather substantial amount accumulated through Government purchase. DMPA has been buying titanium under contract, and there is a substantial amount in the stockpile. Yet we are advised that with the full amount on the stockpile plus all of the production from industry, and other potential production that there is not enough to meet immediate demands for prototype military equipment. We have been asked to expand our facilities to produce supplemental amounts of titanium.

We are not anxious to remain in the production business. There is a big research field that should occupy our full time. However, to accommodate this immediate situation we have put our Boulder City establishment on a full-time production basis consistent with the research program.

We would rather see somebody else increase production, but apparently private concerns are having difficulty with meeting the high output and specifications immediately. We are very willing to serve as consultants to everybody, and to convey the knowledge that our technicians have at this point to the industry; hoping that sooner or later we can get out of this production business.

We are on the same spot in the case of zirconium. We are the major producers of zirconium at the moment, and we want to get out of that business as soon as the defense program needs can be adequately met from other reliable sources.

Mr. KIRWAN. You are in it because you are not out on your own, Mr. Zinner, because some other agencies requested it, especially those connected with national defense.

Mr. ZINNER. That is right. We do not want to abandon zirconium or titanium research. There is a big technical problem involved in the case of titanium, in improving production techniques and cutting the cost of making it from somewhere around $5 a pound down to a more reasonable figure. We are working on that.

Mr. KIRWAN. What does the military give you toward this production and research? Do you have any idea how much money they give you?

Mr. ZINNER. The total last year for research funds alone was about $907,000.

Mr. KIRWAN. For research?

Mr. ZINNER. Yes, sir; essentially for research, for such things as metallurgy and process research.

I think you are acquainted with the operation that we undertook on the Army's account, for making mortar base plates.

Mr. FORBES. I think this is very essential because I think it is a very definite accomplishment.

Mr. KIRWAN. You do not get that over to the Congress. I do not know whether it is our fault or not. I guess it is my own fault as much as anybody else's on this side of the table because we do not ask questions of the Bureau of Mines as to what you are doing, and how essential this agency is to the rest of the Government.

Mr. FORBES. I want to say that I have been Director of the Bureau since a year last November, and I have spent my life in health and safety work in the coal and metal industry, coal to a large extent, and I want to say that the longer I sit on that seat up there the more I am impressed with the grand work that is being done by our scientists in developing and carrying on research work in connection with these metal and mineral assets.

Mr. KIRWAN. That goes for the whole of this agency whether it is trees in the parks, land under the Reclamation Service or whatever it may be. The Interior Department, in my humble belief, is a great department. It is the one that America depends upon. We can go without a mail delivery a day, but you destroy a tree, or let a foot of this good soil get away, and you can never get it back.

Mr. FORBES. You are right about it, Mr. Kirwan.

I would like to have Mr. Zinner tell what we have been doing to assist the Army on these. They are mortar plates, are they not?

Mr. ZINNER. Yes. We are rather pleased with this because it was a short time operation that moved from research right into action. The military 81 mm. mortar requires 4 men to a team. The base is a heavy iron gadget. That is, 2 people have to carry the base, 1 carries the barrel, and so forth.

We made arrangements with the Army Ordnance Corps to try to make a base just as strong as the old one, but half as heavy out of titanium, a single base so one man could carry it.

This involved a production project more than anything else. It involved developing a welding procedure and the analysis of different types of the metal to find out how we could produce a prototype unit that could be adapted to manufacture in quantity. We were successful in that and the military is going into the production of these things now.

In effect, it increased the fire power of a heavy mortar team. It cuts one man off the job of carrying the base plate and permits him to carry ammunition, or cuts one man off the team. Any way you look at it it increases firing power, and we feel that is a rather significant achievement.

Mr. KIRWAN. It does. One or two more men would have to be drafted.

Mr. FORBES. And it cuts down the weight, Mr. Congressman.

Mr. KIRWAN. Yes.

Mr. ZINNER. We have also worked with the military in developing other prototype equipment.

NONFERROUS METALS

Mr. FENTON. Now we will take up the nonferrous metals. We will place page 42 of the justifications in the record at this point.

(The matter referred to is as follows:)

Nonferrous metals

Subactivity	Appropriation 1953	Decreases	Base, 1954	Estimate, 1954	Increases
(1) Light metals	$1,539,868		$1,539,868	$1,639,868	$100,000
(2) Copper, lead, and zinc	867,405		867,405	912,955	45,550
(3) Rare and precious metals	435,723		435,723	510,723	75,000
(4) Other nonferrous metals	472,380		472,380	472,380	
(5) Maintenance, buildings, and facilities	269,749		269,749	269,749	
Total	3,585,125		3,585,125	3,805,675	220,550

Mr. ZINNER. This discussion of titanium comes under the light-metal subactivity.

Mr. FENTON. A great deal of what you have in this category has already been discussed.

Mr. FORBES. To some extent.

MAGNESIUM RESEARCH

Mr. ZINNER. However, the increase item there is for magnesium research; and, as we pointed out a moment ago, our problem here is not only one of supply but of utilization. One other element of concern is these Government-owned standby facilities that are the thermal type of plant. They produce high-cost magnesium, when measured against the brine type of plant. So, a large portion of this effort would be tied up with trying to improve the process used in these Government-owned standby magnesium plants. If the cost could be reduced to the point where industry could operate such plants to make magnesium under normal conditions, we feel that industry could more readily absorb these fluctuations in demand and possibly the need for large standby capacity could be minimized.

Mr. FENTON. Most of the justification is for light metals.

Mr. ZINNER. I have a short statement on this also.

Mr. FENTON. Put it in the record.

(The matter referred to is as follows:)

PROCESS AND ALLOY DEVELOPMENT

Magnesium, the lightest of the structural metals, has proven its value during the two World Wars, and has now taken its permanent place as a mainstay in worldwide development of air travel and air transportation. This metal, derived from raw materials in almost unlimited domestic supply, has already won widespread approval as a substitute in many installations, for aluminum, copper, zinc, and lead. The amount of work which will be needed to develop lower cost production of magnesium and better alloys is justified by its present use, and is necessary in the face of dwindling domestic supplies of strategic metals which it can replace.

Magnesium was not produced commercially in the United States until 1915, although exploratory work had revealed by 1911 that magnesium-rich minerals, particularly dolomite, were abundant and widely distributed throughout continental United States.

Prior to 1915, Germany had been the sole supplier of magnesium to the world. During World War I, eight different companies operated plants for production of magnesium in the United States. Its principal use at that time was for flashlights in photography, in pyrotechnics, and as a deoxidizing agent or scavenger in brass, bronze, copper nickel, and aluminum. A limited amount was used as an alloy with aluminum for castings for aircraft engines and parts of airplanes.

Annual production of magnesium in the United States did not reach 2,000 tons until 1935. In 1936, production dropped to 1,952 tons. By 1940 the United States armament program was under way, and production of 6,261 tons was reported for that year.

In 1936, the Bureau of Mines resumed the study at Pullman, Wash., of the various methods of producing magnesium metal from magnesite ores which had been discontinued in 1934. The Bureau's survey of the mineral resources of the Northwest had revealed extensive deposits of magnesite in Stevens County, Wash., which furnished a large part of the domestic production of magnesia refractories and cements for several years. The production of magnesium from this abundant raw material seemed to offer one of the best opportunities for a new metallurgical industry in the Northwest, to provide a useful outlet for the large amount of power from Bonneville and Grand Coulee.

The research work which was conducted by the Bureau of Mines in cooperation with the State College of Washington in the 1930's upon thermic reduction of magnesium led to the establishment of the large Government-owned silicothermic plant at Spokane, Wash., in 1942.

Military uses demanded the entire production of magnesium during World War II. In the peak year, 1943, production of 183,584 tons of magnesium was reported. In 1946, when magnesium was returned to civilian use, production was reported at 5,317 tons and consumption at 9,873 tons, which indicated that fabricators as well as producers, were reducing their stocks.

The Bureau of Mines had recognized very early that large-scale civilian use of magnesium could not be expected until alloys were developed having great enough tensile strength and sufficient corrosion resistance to justify its extended use as a structural metal. Work was started by the Bureau before World War II to develop better magnesium alloys and more efficient working techniques. Although progress has been made in this direction, to the extent that magnesium can now be used in many instances to replace other more scarce metals, much more work is needed to develop stronger alloys, with greater resistance to corrosion.

Process research on reduction of magnesium-containing minerals has developed a commercial batch-type process by the use of ferrosilicon as a reducing agent. Four of the Government-owned magnesium plants are silicothermic plants. The cost of production in these plants by the present batchtype process is approximately double the market price of magnesium produced in the Dow Chemical Co.'s electrolytic plant. The development of a thermal process of reduction competitive with the electrolytic process employed by the sole independent producing company would promote the establishment of additional independent producers. This would insure the production of magnesium at a saving of electric power in times of emergency, and would result in substantial savings to the Government in operating the Government-owned plants for defense.

The Bureau of Mines proposes to expand research now underway on development of new equipment and process techniques to obtain lower cost in production of magnesium, and the development of new magnesium alloys with greater strength and increased corrosion resistance.

COPPER, LEAD, AND ZINC

Mr. FENTON. For copper, lead, and zinc you are asking for a $45,500 increase.

Mr. FORBES. I wish you would pass this illustrated book around. That is the Laramie alumina plant that I know you will be very much interested in seeing.

Mr. ZINNER. Increases requested under the copper, lead, and zinc title is for work in the field of recovery of secondary nonferrous metals.

This country is probably the most wasteful of all in the matter of properly salvaging many essential elements from scrap and waste products. We have initiated what I feel is a rather successful series

of investigations at College Park, Md., aimed at trying to recover clean, usable material from the substantial volumes of scrap.

Without getting into too much technology here, one of the processes is the vacuum leaching process. One of them has to do with centrifuge techniques, and another has to do with vacuum distillation.

There are some display panels here if you would care to look at them and also some pictorial material that goes with them.

RARE AND PRECIOUS METALS

Mr. FENTON. What about your rare and precious metals for which you are asking an increase of $75,000?

Mr. ZINNER. The increase under rare and precious metals is marked almost entirely for research in columbium and tantalum.

This is an instance where the supply from domestic sources is about 1 percent of our needs.

This situation was not too serious until jet propulsion and a few other things came into being. They are very important alloying elements, and they have been a matter of concern to the defense agencies over a period of years.

We find that there are numerous places throughout the country where low-grade sources of supply appear to exist, but there is a very complex metallurgical and economic problem involved in trying to win these products from such sources. One of the overlooked sources are the waste products from the alumina operations, the alumina operations in Arkansas. Also we find that there are rather good prospects of byproduct production from the monazite operations.

Off the record.

(Discussion off the record.)

Mr. FENTON. All right, that takes care of the increases.

PERSONNEL AND ORGANIZATION OF BUREAU

Mr. BUDGE. There are just two questions I would like to ask, and I think they will just take a very few minutes.

Dr. Forbes, as you know, I live in a mining State.

Mr. FORBES. Yes, sir.

Mr. BUDGE. Of course, we are having an awful time selling our lead, zinc, and antimony and lots of other things now.

Mr. FORBES. Yes.

Mr. BUDGE. I wonder if it would be possible to effect any savings by abolishing the regional offices and centralizing the Bureau. Do you think that there is any possibility of that?

Mr. FORBES. I doubt it very much, Mr. Budge. It has come right down to us from the secretarial level. I think I was one of the principal objectors to this regionalization when it was first put into effect, but we would never be able to handle the details here in Washington in connection with it.

Mr. BUDGE. I notice that you have one of the highest average grade classifications of any bureau in the Department, and I note that in this budget you are contemplating increasing from GS–6.9 to GS–7.3. Why is that increase necessary?

Mr. FORBES. There are a lot of scientific people connected with the Bureau, and, believe me, it takes real money to attract such persons into the civil service. Some of our grades should be much higher than they are to encourage scientific people to come into our organization. Of course, mine-inspection work has increased the average grade, to some extent.

I think I explained that pretty fully the last time. To give you an idea, Congressman, a grade GS–12 is paid a starting salary of $7,040 a year, but mine foreman and assistant foreman make up to $10,000 or $12,000 a year. So, you see what we have to compete against in trying to get the right kind of personnel into the Government service.

Mr. BUDGE. I note that you have a large increase, $1,403,000, in the mine inspection program. As I understood your testimony when you appeared before the committee for your supplemental you said that what amounted to the threat of Federal inspection had brought the operators into line so that they were more prone to operate within the law than previously.

Mr. FORBES. Yes; they are cooperating with us in better shape.

Mr. BUDGE. If that is true, why do you need this large increase?

Mr. FORBES. With this increase, if Congress should give us the 75 inspectors, and you gave us 50 in the supplemental, it would mean that we would only be able to make 2 inspections per year. You can visualize our inspectors going to a mine just twice a year. There are a whole lot of things that can happen in the interim.

Mr. BUDGE. Of course there are, but the legislation requires you to make only one.

Mr. FORBES. That is the bare minimum, however.

Mr. BUDGE. Yes. Is this increase of $1,403,000 in line with the action of the Congress on the supplemental?

Mr. FORBES. No. That excludes all of the nonrecurring items, such as an automobile which you gave us in the supplemental.

Mr. BUDGE. On a pro rata basis is this figure now the figure which is based on the needs as you presented them in your budget, or the amount which was allowed to you by congressional action?

Mr. FORBES. We are supporting the 1954 figures, Mr. Budge, the 75 inspectors and supporting personnel.

Mr. BUDGE. It is just the representation of your supplemental?

Mr. FORBES. That is right.

Mr. FENTON. With an additional 25 inspectors?

Mr. FORBES. That is right. The chairman asked me this morning if this met with the approval of the Secretary, and I told him yes. What the Bureau of the Budget will do, Congressman, I am unable to say. Of course, if we get only the 50 inspectors we will go ahead and do our level best to do a good job. On the other hand, we feel that even with the 75 inspectors we will only be able to make about 2 inspections a year.

OTHER METALS

Mr. FENTON. Now, if there is anything else you want to put in the record at this time regarding the various important metals we will be glad to have it introduced at this time.

Mr. ZINNER. Thank you. I would like to insert a statement on columbium-tantalum, one on selenium, one on germanium, a state-

ment on zirconium, a statement on beryllium, and a statement on rare earths.

(The matter referred to follows:)

Columbium-Tantalum

The domestic production of columbium-tantalum for 1952 is estimated to be less than 1 percent of our requirements for this year. The increased demand for ferrocolumbium-tantalum in jet engines for military aircraft, and for other important defense uses, has exceeded our total supply.

To alleviate this short-supply situation, the Bureau of Mines, in September 1952, initiated a program to investigate domestic sources of columbium-tantalum and a program of metallurgical research to include: mineral identification and rapid analytical methods; beneficiation; and extractive metallurgy. The incentive purchase program of Defense Materials Procurement Agency stimulated interest in the production of these materials.

As a result of the Bureau's investigations new important domestic sources are being developed. In conjunction with the monazite explorations conducted by the Bureau, important deposits of columbite-tantalite in placer deposits have been discovered in Idaho and South Carolina. New domestic sources are being developed in the Kings Mountain, N. C., spodumene belt and in the Black Hills deposits of South Dakota as a result of the Bureau's investigations of byproduct minerals in pegmatite deposits. An investigation, on a pilot-plant scale is being conducted by the Bureau to recover columbium-tantalum from bauxite ores and titanium deposits in Arkansas.

Even with the expected increase in domestic production we must still depend on foreign sources for a large part of our requirements. At Albany, Oreg., the Bureau is developing metallurgical processes to improve the recovery of columbium-tantalum from tin slags, at the present time our largest potential source of these metals. Other developments in the field of metallurgical research are: (1) A fluorescent spectrometer method for columbium analyses developed at Rolla, Mo. This method shows promise of eliminating the bottleneck in the purchase of columbium-tantalum ores, caused by the time consuming conventional assay methods now being used. (2) A method employing hydrofluoric acid as an etching agent has been developed at Raleigh, N. C., for the identification of columbium-bearing, radioactive, black, opaque, minerals. (3) Good results have been obtained at Raleigh in the separation of columbium-bearing, radioactive minerals by electromagnetic and electrostatic means.

The Bureau will continue its program of developing new domestic sources, particularly in placer deposits and as a byproduct of pegmatite mining, and will continue its metallurgical research to improve recoveries of columbium-tantalum by continued studies of identification and analytical methods, beneficiation, and extractive metallurgy.

Selenium

Since December 10, 1951, selenium has been under allocation by virtue of order M–91 issued by the National Production Authority, which agency stated that allocation was necessary if essential defense requirements were to be met. The metal was in short supply throughout 1952 with consumers receiving about 80 percent of their requirements; indications are that inadequate supplies will continue throughout 1953 and in all probability longer despite substantial imports.

Selenium is used (1) in the manufacture of rectifiers to convert alternating current to direct current and to perform the same function as a power tube in electronic circuits, (2) in the production of special grades of stainless steel to improve machinability and in the casting of stainless steel to provide gas control and thereby assure soundness of castings, (3) as a decolorizer in the glass industry, and (4) for diversified chemical purposes, including its use (*a*) in the production of pigments and enamels, (*b*) as a rubber accelerator, and (*c*) as a catalyst in the synthesis of organic chemical and drug products.

The most critical and strategic use of selenium is in the manufacture of the selenium rectifier which eliminates the use of heavy and bulky transformers and rectifier tubes in radio and television sets. Military uses of the selenium rectifier cover a wide range of applications, including aircraft controls, battery chargers, carbon arc lamp, degaussing equipment, dynamotor power, guided missiles, ground starters for aircraft, magnetic amplifiers, radar equipment, radio receivers and transmitters, relay and solenoid power, sonar equipment, telephones, teletypes, and voltage regulators.

The only commercial source of selenium at present is the anode mud or slime produced in the electrolytic refining of blister copper, and hence the production of selenium is currently limited by the production of electrolytic copper; no important increase in the production of electrolytic copper is expected.

The Bureau has in progress at the Intermountain Experiment Station, Salt Lake City, Utah, research investigations directed toward the recovery of selenium in smelter and industrial-plant products, which selenium is currently lost as dust, fume, and in other forms. Additional investigations by the Bureau are directed toward the recovery of selenium from entirely new sources, such as the seleniferous tuffs in Wyoming. Encouraging results have already been obtained in the course of the Bureau's research efforts, and indications are that the investigations in progress will achieve their objective of making increased supplies of selenium available.

Germanium

Germanium is the metal that has been widely proclaimed as responsible for the forthcoming "revolution in electronics." This role is by virtue of germanium being a semiconductor and the basic element in electronic devices known as diodes and transistors which are apparently destined to achieve almost every function fulfilled by the vacuum tube. Germanium diodes and transistors are smaller, lighter, and potentially cheaper than their tube counterparts. They require no hot filament or hot cathode, hence require much less power to operate, and have apparently an indefinitely long life.

The germanium diode, which derives its name from the two-element vacuum tube that it replaced for rectification purposes, is used in various types of electronic circuits, including radio, television, measuring-equipment, carrier-current (telegraphy and telephony), multiposition-switching, and voltage-multiplier circuits. Diodes have been made in small sizes by the millions for several years; about 6 million were made in 1951. Larger sizes for high-power applications are said to be in pilot plant production.

The transistor, which was invented in 1948, is essentially a triode form of the well-known crystal diode detector employed in radio; it can be used as a voice amplifier, a television picture amplifier, a pulse amplifier, and as an oscillator. Production of transistors in the first half of 1952 was at the rate of 100,000 a year.

In November a portable battery-operated television receiver was demonstrated that was tubeless except for the picture tube. It contained 37 transistors, used one-tenth the power of a standard table-model receiver, and was about one-quarter the weight and size of such a receiver.

The principal domestic source of germanium is the zinc sulfide concentrate produced in the tristate lead-zinc mining district of Missouri, Kansas, and Oklahoma. The metal also is found in certain coals but up to this time they have not been an economic source of germanium. Production of germanium has been relatively small; however, as the "revolution in electronics" develops, demand for the metal should increase substantially.

The Bureau has underway at the Rolla, Mo., station research investigations directed toward increasing the metallurgical efficiency in recovering and refining germanium, which is now quoted at $340 a pound. At its Pittsburgh, Pa., station, the Bureau in cooperation with the Signal Corps Laboratories, Fort Monmouth, is investigating the recovery of germanium from coals. Both industrial and military requirements for the metal are expected to increase substantially, and the Bureau's research effort has as its objective the development of adequate sources of germanium supplies to satisfy those requirements.

Zirconium

The mechanical properties of zirconium coupled with its corrosion resistance and low neutron absorption make it a promising structural material for nuclear power reactors. Zirconium, in its ductile form, is a new metal industrially speaking, and only a few of its commercial uses have been envisioned. The combination of corrosion resistance and desirable mechanical properties probably will result in the acceptance of zirconium by the chemical industry.

The Bureau of Mines began investigating the possibility of developing an economical process for producing ductile zirconium metal in January 1945, and the Northwest Electrodevelopment Laboratory, Albany, Oreg., was selected as the site for the experimentation. In February 1945, 90 grams of zirconium metal were produced at the Albany laboratory, and results were encouraging. Improvements were made in processing and operating techniques, and in November 1945

the first sheet of zirconium was rolled from an arc melted button. Beginning December 1945, 4 to 6 pounds of zirconium metal per week was made available for chemical studies, fabrication, and melting. During February 1947 a pilot plant capable of producing 60 pounds of zirconium metal per week was put in operation. In cooperation with the Atomic Energy Commission and the Bureau of Ships of the Navy, steps were taken to expand the zirconium metal production facilities at a rapid rate. A second pilot plant, with a capacity of 500 pounds a week, was designed, built, and placed in operation in June 1949. Demand for zirconium metal increased so rapidly that a larger plant became necessary; the new plant, placed in operation in August 1950, was enlarged in January 1951 and further enlarged in October 1951. At present the rated capacity of the Bureau zirconium plant is 270,000 pounds of clean zirconium sponge per year. Alterations are in progress to increase this capacity.

Throughout the Bureau's program, new knowledge developed relative to the properties and potentialities of zirconium, commercial methods for its production, and the characteristics of numerous zirconium alloys has been made available to industry as is customary practice with the Bureau. For example, the design of and the methods to be employed at the new zirconium plant being erected by the Carborundum Metals Co., Inc. (subsidiary of the Carborundum Co., Niagara Falls, N. Y.) at Akron, N. Y., are based on technical and scientific know-how resulting from the Bureau's program at Albany, Oreg.

Currently, the Bureau is continuing its research investigations on zirconium both at Albany, Oreg., and several of the other experimental stations. Much remains to be done to obtain maximum utilization of the metal in the industrial economy of the country. For instance, the production process currently used is a multistep batch process; a continuous process would effect a material reduction in the present cost of about $15 a pound for the metal.

The supplies of zircon sand, the raw material from which zirconium is obtained, are ample to satisfy all foreseeable requirements. Extensive deposits of zircon are available in Florida, California, and Idaho.

Beryllium

The increasing demand for beryllium and its oxide for atomic energy purposes and as an alloying agent for materials of specialized, strategic uses, has stimulated the search for increased supply. The domestic production of beryl, the only commercial source mineral of beryllium at the present time, amounts to less than 15 percent of our requirements. Because satisfactory beneficiation methods have not been developed to a high degree of efficiency, recovery of beryl is by hand sorting, with an average recovery of about 20 percent. It is imperative that mechanical recovery means be perfected to increase our supply of this strategic commodity. The Bureau of Mines is directing its principal effort toward the recovery of beryl to increase the workable reserves of domestic low-grade deposits.

At College Park, Md., an electrostatic process is being developed which has performed satisfactorily on beryl ores from the New England States under certain conditions. A survey is being made of all beryl deposits in the New England area and tests, through the pilot-plant stage, will be conducted on the more promising deposits.

A flotation process, developed at Rapid City, S. Dak., has passed through the laboratory stage and will be tested on a pilot-plant scale. A patent application has been filed by the Bureau on this flotation process.

The largest known beryl reserve in the world is the spodumene belt at Kings Mountain, N. C. The Bureau has made a cooperative agreement with the Foote Mineral Co. to perfect a method to recover beryl as a byproduct from its spodumene mining operation.

As mechanical recovery methods are developed, not only domestic supplies of beryl will be increased but also supplies from foreign sources where hand-sorting methods are used exclusively.

Toward this goal, the Bureau of Mines will continue its efforts.

Rare Earths

Prior to 1910, monazite was mined in small amounts in North and South Carolina. From that time until 1951 this mineral, the principal source of the rare earth metals, was imported from India, Ceylon, Malaya, and Brazil because it could be produced much cheaper in those countries. Between 1950 and 1952 export restrictions were placed on monazite by India and Brazil because monazite,

which contains from 3 to 10 percent thoria (ThO_2), is the principal source of the radioactive metal thorium. In addition to this fissionable element, monazite contains some 14 or 15 other metals which as a group are known as the rare earth metals. All of these elements are vitally needed by industry to meet our defense requirements. The rare earth metals have special uses in the manufacture of alloys needed for armorplate and jet motor production as well as in special glasses where compounds of these metals are required in the production of optical instruments, military searchlights, and special lenses.

The Bureau of Mines, in cooperation with the Atomic Energy Commission, started a search for domestic sources of monazite in 1948. Field investigations, which included churn drilling, trenching, shafting, and dredge sampling, were initiated in California and Idaho. Large minable deposits of monazite-bearing alluvials have been found in Idaho and in North and South Carolina. Other sources may be developed in Alaska, Montana, Wyoming, Nevada, Georgia, and Florida.

As a result of this work, private companies have installed three bucket-line dredges near Cascade in Valley County, Idaho, and are recovering sufficient monazite to meet about half of the country's domestic requirements for this mineral. In other parts of Idaho and in South Carolina, private industry is also developing placer deposits which have recently been discovered under this program.

Dredging has long been used for the recovery of gold from placer deposits, but monazite, which has a much lower specific gravity than gold, had not, before 1951, been mined on a commercial scale by this method. When the three conventional bucket-line gold dredges were first placed in operation in Idaho, they were able to save only about 50 percent of the monazite contained in the alluvium. Bureau of Mines engineers installed mechanical sampling equipment on the dredges to determine where the major losses occur. Similar studies were also made in the electromagnetic separation plants where the monazite is finally cleaned for market. As a result of these efforts, the beneficiation methods, both aboard the dredges and in the separation plant, have been improved to the extent that 30 percent more monazite is now being recovered from the gravels and dredging is now accepted for the first time as a practical and economical mining method for the recovery of monazite from placer deposits.

In the Bureau's field stations, studies are being made to develop new types of equipment which will save even greater quantities of monazite. Other studies are being made to design portable mining equipment which could be used for mining the narrow and shallow stream deposits found in the Carolinas.

A large deposit of bastnaesite, the second most important source mineral for the rare earth metals, was discovered in California. However, before this deposit can come into full production, continued research work to develop satisfactory beneficiation processes for the recovery of the mineral will be required. Bureau stations are working on this problem with some success. In addition, laboratory studies will be required to develop satisfactory extractive metallurgical methods for recovering the individual rare earth metals. The continuation of these Bureau programs will make the United States self-sufficient with regard to the rare earth metals which are vitally needed for both military and civilian uses.

ALUMINA PLANT AT LARAMIE, WYO.

Mr. FENTON. Before we leave this particular category of nonferrous metals, what is the situation with respect to the alumina plant at Laramie? Is it in production yet, and were all modifications as planned completed within the amounts allowed for this purpose in 1953? We allowed in 1953 $1 million which was supposed to complete the modification and provide for 3 months' operation. What is the situation with regard to that?

Mr. FORBES. I am going to let Mr. Zinner answer that because he has it well documented. All I want to say is that I think the men out there are doing a splendid job.

Mr. FENTON. Is the plant completed?

Mr. FORBES. I think the whole business now is completed. They tore down the overhead tramway that went from the alumina plant over to the monolith plant.

Then we had to put up a crushing plant, and that is completed. Then you saw that pilot plant that we set up. We are experimenting as we go along to make sure that each one of these operations, Dr. Fenton, is proved out before it is put in the big mill.

I want Mr. Zinner to carry it on from there.

I am hoping within a very short time they will be turning out alumina from that plant. I think we are keeping pretty well up with the schedule.

Mr. ZINNER. Yes; I think we are right on schedule.

Mr. FORBES. It is a good job.

Mr. ZINNER. I would like to point out that this plant that was supposed to have been completed, was never operated, so that all of the operating bugs that would normally come out during a shakedown operation period are still there. We are experiencing some of those bugs at the present time. There has been difficulty with feeders, blocked feed lines, underpowering, and things of that kind, but those are all being remedied as the plant work progresses.

Up to the moment we have made sinter in the large kiln, and leaching experimental work is progressing in good shape. I am sure that by the end of this fiscal year we will be producing from the full-scale plant and be able to make some preliminary analyses of the process.

There is a comprehensive statement on this if you would care to have it in the record.

Mr. FORBES. Would you like to put that in the record?

Mr. FENTON. Do you want that in the record?

Mr. FORBES. Yes, I think it is very important.

(The matter referred to follows:)

ALUMINA

DEMONSTRATION PLANT AT LARAMIE, WYO.

The demonstration plant for production of alumina located at Laramie, Wyo., is the final stage in experimental research on the lime-soda sinter process for producing alumina from low-grade siliceous aluminum ores. The utilization of low-grade ores became urgent during World War II when bauxite imports were threatened by submarine activities in the Caribbean. At that time the Bureau of Mines investigated a number of processes for production of alumina and the War Production Board at the recommendation of the Bureau of Mines in 1942 and 1943 directed the allocation of Government funds for the erection of four demonstration plants to determine the feasibility of using domestic raw materials, other than bauxite, for the production of alumina. These plants cost $3 million to $5 million each, but none was operated to the point of giving conclusive results by the end of the war when Government contracts for construction and operation of the demonstration plants were canceled. The Laramie plant was the last plant built and the construction was never completed. It is the only demonstration alumina plant that has not been converted to other uses.

Under the Defense Production Act aluminum production capacity is being expanded to over double the pre-Korean level. This means that dependence on imported bauxite and vulnerability of the aluminum industry will be considerably increased. The domestic reserves of high-grade bauxite are limited in terms of domestic requirements. Larger amounts of bauxite may be made available by resorting to treatment of lower-grade ore but even this would not be sufficient to support the industry for any extended time. It was considered advisable to further develop methods for production of alumina from bauxite clays, kaolinitic clays, anorthosite, and other aluminous raw materials containing large amounts of silica.

In September of 1951 the custody of the Laramie alumina plant was transferred from the General Services Administration to the Bureau of Mines. In the 1952 Interior Department Appropriations Act (Public Law 136, 82d Cong.) 347,110

was specifically authorized for completion of the plant. The major construction item was a raw-material crushing plant and relocation and erection of the raw-material conveyor system; this construction has been completed. A water-supply and water-softening system was also provided and a small pilot unit was installed. Numerous difficulties not anticipated when the project was started were encountered. The roofs on the main buildings leaked and were resurfaced; the emergency generator was mounted on a faulty foundation which had cracked and this was replaced and the generator realined; sewer lines that had never been completed were covered and had to be located and connected; supports for the water storage lead tank were inadequate and required reinforcement.

During the first half of fiscal year 1952 the small pilot equipment was operated to train personnel and to obtain preliminary information on the extraction of alumina from anorthosite, the first ore to be tested in the plant. Initial operation of individual units in the blending and sintering building showed defects in plant equipment; multiple leaks were discovered in the waste heat boiler, the starting control for the 900-horsepower motor that drives the raw slurry ball mill and the spur gear on the mill were defective. The solution feeder to the raw slurry mill was not sensitive enough to maintain proper control.

Experimental operation of this plant, which was available with minimum expenditure for plant and equipment, will continue, to investigate the technology, equipment and product purities on a scale that will provide information for a conclusive technologic and economic appraisal of nonbauxitic materials for aluminum production by the lime-soda sinter process.

Mr. KIRWAN. Who owns the plant?

Mr. FORBES. Well, it is one of those war babies. The Government owns it or the RFC took it over, did it not?

Mr. RICE. Yes, or the Defense Plants Corporation.

Mr. FORBES. We have had it for 2 years, and we are doing what we can to complete our experimentation in this time. If this thing proves out, which I hope it does, it is going to be important to southern Wyoming. It could be the basis for a real industry.

NONMETALLIC MINERALS

Mr. FENTON. Now we will take up nonmetallic minerals. We will insert the table appearing on page 49 of the justifications in the record at this point.

(The matter referred to follows:)

Nonmetallic minerals

Subactivity	Appropriation, 1953	Decreases	Base, 1954	Estimate, 1954	Increases
(1) Minerals of construction	$207,808		$207,808	$257,808	$50,000
(2) Chemical materials	119,138		119,138	195,643	76,505
(3) Abrasives and hard materials	117,358		117,358	117,358	
(4) Ceramics and fertilizer materials	300,129		300,129	360,129	60,000
(5) Maintenance, buildings and facilities	88,861		88,861	88,861	
Total	833,294		833,294	1,019,799	186,505

Mr. FENTON. Will you explain the increase in the subdivision nonmetallic metals very briefly?

Mr. ZINNER. Yes, sir.

In January of 1953 the Defense Minerals Procurement Administration requested this Bureau to implement a long-range program on asbestos and suggested that funds be made available under its borrowing authority.

The Bureau of the Budget felt that it was less desirable to contract over a 2- or 3-year period with DMPA than it was to insure this long-range work being done under the Bureau's conservation and development program.

Accordingly, we have started this program this year and the amount in the budget is consistent with the DMPA estimate of the scope of this job.

This involves essentially 2, or possibly 3, operations. One is a reanalysis of our potential domestic sources, particularly with regard to those in Arizona. The other has to do with the processing of foreign asbestos, principally Canadian, for removing iron and other impurities so that it can be used for strategic purposes. A third field of operation has to do with making satisfactory substitutes, synthetically.

Mr. FENTON. All right, put a short statement in the record at this point on asbestos.

(The matter referred to follows:)

ASBESTOS

Without asbestos it would be very difficult to keep the wheels of American industry running. This unique fibrous mineral product is used in large quanties to produce many absolutely essential components of transportation and manufacturing equipment. Its use in brake linings and in electrical insulation illustrates the fundamental importance of our asbestos supplies. Similarly, the mineral is the basis of a large asbestos products industry making a great variety of construction materials such as shingles and heat insulating products.

Whereas the United States is by far the greatest consumer of asbestos, its production is very small. Domestic output of asbestos supplies only about 6 percent of our requirements. The bulk of United States supplies is imported from foreign countries. This situation is particularly serious in time of an emergency when the strategic grades of asbestos are difficult to obtain from overseas sources.

There are a number of possible means whereby the supply position of the United States can be improved. (1) More thorough examination of the serpentine areas, particularly in New England and the west coast where asbestos is known to occur, may reveal deposits of commercial sizes. (2) To reduce United States dependence on African strategic grades of asbestos, adequate methods of beneficiating the more easily available Canadian grades should be found. (3) A third alternative is research on substitutes. There are several possible substitute materials which constitute promising fields of research. Currently available substitutes for asbestos have not been satisfactory for many of its important uses including gaskets and packing in steam engines, covering for underground cables, chemically resistant pipes and conduits, as acid filters, and as flexible insulators at high temperatures. It was the ability of asbestos to withstand such severe conditions, together with shortage of supply in this country, that caused it to be classed as a strategic mineral. (4) Finally, there is a real prospect of successfully developing a method by which asbestos may be synthesized in commercial quantities. The problems involved in asbestos research are many and complex and therefore their solution can be anticipated only over a period of time.

The Bureau of Mines has started a comprehensive investigation of asbestos along the lines indicated above. Approximately $23,000 is devoted annually to laboratory research on the problems involved in asbestos synthesis; small sums are used in conducting field examinations of asbestos deposits and a preliminary investigation of asbestos beneficiation has been started.

During the last several years the electrotechnical laboratory has made a promising start in this difficult field of synthesis. Thus the feasibility of crystallizing a large number of different fluor-amphibole asbestos compounds from melts has been demonstrated. Fibers up to one-half inch in length have been produced. Those tested to date are too brittle and nonflexible for most asbestos applications but it is believed that improvements in crystallization techniques may overcome this disadvantage. The feasibility of synthesizing amphibole asbestos by reaction

between water vapor and solids also has been demonstrated. The fibers so far produced are microscopic in size but should be suitable as a filler in plastics used for electrical applications.

In addition to continuing the above-mentioned lines of investigation, the research has recently been expanded to include studies on a promising asbestiform compound of potassium lead silicate that has been discovered. This compound may well prove to be a key to understanding the structural and physical-chemical conditions that must be met in order to synthesize asbestiform compounds in general. The compound is expected to have commercially useful properties in its own right.

With the increase of $50,000 requested in the present budget, the Bureau proposes to expand its work on the examination of deposits and on asbestos beneficiation. A portion of the funds may also be used in research on substitutes.

CHEMICAL MATERIALS

Mr. FENTON. What about your chemical materials where you are requesting an increase of $76,505?

Mr. ZINNER. This program involves fluorine. It has been evident for a considerable period of time that the domestic sources of natural fluorspar, which is the principal fluorine mineral, are particularly inadequate. The program has to do with improving methods for using low-grade ores and with the investigation of other sources of fluorine, specifically phosphate deposits that contain minor amounts of fluorine minerals.

The demand for fluorspar and flurine compounds comes about through the added requirements of the expanded aluminum industry, and through an increased demand for hydrofluoric acid which enters into many phases of our chemical industry.

While the demand has gone up our reserves have not been expanded, and we feel that other sources such as the phosphates and other materials which have not heretofore been considered important fluorine sources, should be studied.

CERAMICS AND FERTILIZER MATERIALS

Mr. FENTON. What about ceramics and fertilizer materials?

Mr. ZINNER. There is no addition request, as I recall, under that, but we have continued the ceramics program. You might be interested in this display that shows the progress we have made in producing certain superduty refractories out of domestic material to free us of our dependency on Indian kyanite and other foreign materials. This shows some adequate synthetic refractory material and what the potential might be in other areas.

Mr. FENTON. Put a short statement in the record about what you have been doing along this line and that also includes fluorine which you just talked about.

Mr. ZINNER. Yes, sir.

(The matter referred to follows:)

FLUORINE

The principal fluorine mineral is fluorite, commonly called fluorspar. This mineral, or products derived from it, is essential to our steel, aluminum, aviation gas, and atomic energy programs. Certain grades of fluorspar are being acquired for the national stockpile.

Nearly 80 percent of domestic production is in a small area of southern Illinois and western Kentucky, with the bulk of the remainder coming from Colorado and New Mexico.

The United States formerly was able to supply most of its requirements for fluorspar from domestic sources. However, in recent years it has been necessary to import increasing tonnages, principally from Canada, Germany, Mexico, and Spain. Imports now constitute about one-half of our total supply. Rapid depletion of high-grade domestic reserves and increasing requirements are threatening the adequacy of future supplies.

Both industry and Government are participating in a program to provide adequate future supplies and some progress is being made.

In those instances when industry is unable or unwilling to explore prospective deposits the Bureau of Mines conducts investigations. A recent example of such activity illustrates the value of this part of the Bureau's program. Late in 1951 a mineral occurrence in Ravalli County, Mont., was called to the attention of the Bureau. The mineral was identified as fluorspar and the area was investigated by drilling, trenching, and sampling. An important deposit of fluorspar was revealed and in recent months has been developed into one of the largest producing mines in the United States. Such investigations should continue.

Some known deposits of fluorspar, by reason of physical properties, grade, or associated minerals, are not amenable to recovery in usable form by known methods of beneficiation. Intimate mixtures of fluorspar and barite occur in New Mexico, Tennessee, Kentucky, and Illinois. The Bureau is conducting research on the separation and recovery of these minerals with some success but an entirely acceptable fluorspar product has not yet been made. Some fluorspar can be recovered only as flotation concentrates which, because of fineness, must be pelletized to be usable in steel furnaces. Known methods do not produce a material which is widely acceptable to the steel industry. Research along these lines has a good chance of success and should be continued.

Both industry and Government have done considerable work on the recovery of fluorine from phosphate rock and several processes have been devised, none of which are sufficiently successful to permit full utilization of the enormous quantities of fluorine—now evolved as a waste gas in the preparation of phosphate fertilizers. More economical and technically adequate processes are needed.

For many years the Bureau has collected, compiled, and distributed economic and statistical data on the fluorine industry and furnished informational, technical, and advisory services to industry, the public, and other Government agencies.

The Bureau will continue to provide the fact-finding services outlined above. Research will be accelerated as rapidly as feasible because of the increasing precarious supply position of the United States.

Mr. FENTON. What is the Bureau doing in this field which cannot be done by industry if the Bureau discontinued this?

Mr. ZINNER. Of course, most of these fields that I am speaking about, or, many of them, are fields in which the industry also has a substantial research program in progress.

In the case of fluorine, if we did defer that work, I doubt if any private group would take it up at this stage of the game. It has not progressed far enough to be of interest to industrial institutions.

We feel that we should carry on these research jobs to the point where the results are sufficiently interesting for industry or its institutions to pick up the job and to carry it forward. At that stage we prefer to drop out of the job.

We are almost at that stage, if not, very close to it, in the case of synthetic mica.

In that instance we have synthesized quite satisfactory mica and we have interested a number of people in getting into the game. In this case first by means of cooperative effort with the Bureau in which they put up money. This is not a one-way street as far as the taxpayer

is concerned. When the technology and economies work out to their satisfaction, they will take it over and incorporate it into their own operation.

In a good many of the problems I have talked about, industry has put up a substantial sum of money either directly, or through their organizations or research establishments. Manganese slag is just one example of that.

Mr. FORBES. In our synthetic mica program at Norris most of that money comes from industry, does it not?

Mr. ZINNER. Originally it came from one or the other branch of the military; I believe the Signal Corps in this case. Later we were successful in getting some private interests into it. Our work in that field has been substantially supported by someone else. I think it will pass directly to industry very soon.

Mica is a particularly significant example because it is one case of a highly strategic commodity, which may eventually be largely taken over by a synthetic product developed through this cooperative type of effort. We feel that this path has been the proper one to follow and it is the pattern for many other operations.

Mr. FENTON. All right, just place in the record some short statement on those various ceramics, on mica particularly.

(The matter referred to follows:)

MICA

Sheet mica is an essential component of many important electrical and electronic devices used in war and peace. The United States, producing only about 5 percent of its requirements of high-quality mica, is virtually dependent on imports, primarily from India and Brazil. Supplies from India, the principal source of strategic mica used in high-duty capacitors and other electronic parts, would be extremely uncertain in the event of war. Substitutes have been developed for the lower qualities of mica. The Bureau of Mines program on the synthesis of mica from available domestic raw materials is one important avenue of approach to self-sufficiency.

Since September 1947, the Bureau of Mines, at the Norris, Tenn., Electrotechnical Laboratory, has been conducting fundamental studies on synthetic mica in cooperation with the Office of Naval Research, the Bureau of Ships, and the Army Signal Corps. Accomplishments under this program have demonstrated that a new type of fluorine mica (fluor-phlogopite) differing in mineralogical composition from natural mica can be synthesized from a melt and by solid state reaction (sintering) of the batch materials. Fundamental data on the nature and extent of isomorphism and the partial development of an inexpensive process for crystallizing synthetic mica have resulted from this program. Fluor-phlogopite has physical properties superior to natural mica, especially at high temperatures. Another important result of this program has been the development of a hot-pressed mica ceramic capable of being machined and with electrical properties that make it a possible substitute for strategic block talc. Synthetic mica also shows promise as a raw material for built-up mica products to replace imported mica.

Although the ultimate goal of producing a high yield of large-sheet mica crystals has not yet been attained, the gratifying achievements of the Bureau's program to date fully warrant the continuation and extension of the investigations directed toward complete self-sufficiency in strategic mica. The program proposed for the immediate future includes the following major phases:

1. Intensified research on fundamental studies of crystal growth and structural defects to facilitate the production of larger and purer synthetic crystals.

2. Systematic studies of isomorphism of other mica varieties similar to fluor-phlogopite and suitable for synthesis.

3. Investigation of synthetic mica as a possible constituent of mica cermets.

(A cermet is a mixture of a ceramic material and a metal. Cermets withstand higher temperatures and have greater resistance to thermal shock than ordinary ceramics. They also are finding a field of use as electrical resistors.)

4. Development of efficient methods of preparation of synthetic flake mica for built-up mica products.

5. Preparation of synthetic mica samples for industry evaluation.

Clay

Shortages of clays and specialized types of ceramic materials for many uses exist in certain regions of the United States that may be alleviated or resolved through research. Field, laboratory, and industry studies are needed to develop new sources of these raw materials and to devise techniques for the effective utilization of established reserves of promising materials.

The rapid industrial growth of the Pacific Northwest has outrun the readily available resources of clays for refractories and various types of structural clay and other ceramic products. Large quantities of these products, especially refractory brick for the expanding metallurgical industry, are shipped in by rail from distant points.

In Colorado, Utah, and California there is a severe shortage of low-cost high alumina raw materials for the manufacture of superduty firebrick to serve the important metallurgical and glass industries of the region.

A shortage of inexpensive lightweight concrete aggregate raw materials exist in many areas of the United States, particularly in Indiana, Illinois, North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Wisconsin, Texas, Florida, the New England States, and Alaska. European pumice currently is being imported into New England and Florida. In many instances the shortages may be eliminated by utilization of expanded clays and shales. The Bureau of Mines contributed materially to the economy of other regions through its previous research on lightweight aggregate production (see R. I. 4401, Production of Lightweight Concrete Aggregates from Clays, Shales, Slates, and Other Materials, 1948) and an extension of the studies to the listed regions conforms to the Bureau objectives.

Catalytic grade halloysite (clay) or its equivalent is becoming increasingly important, especially as a catalyst in the cracking of high-sulfur petroleums. A single corporation controls the major domestic commercial halloysite deposit (in Utah) and also controls, by patents and secret processes, much of the technology of preparing the material for use. Impure deposits of halloysite occur in Indiana, North Caroline, Georgia, Alabama, and elsewhere. Indications are that some kaolins contain a holloysite fraction. In the public interest, and to improve reserves of a material in short supply, it is desirable that the Bureau of Mines investigate holloysite and related aluminum silicates for catalytic uses.

Major projects that the Bureau of Mines will conduct under this program are (1) the beneficiation of Pacific Northwest kaolins to meet the positive need in that area for suitable kaolins for paper, whitewares, and lightweight refractories manufacture, (2) the exploration and evaluation of deposits of refractory clays in the Western States, (3) the exploration and beneficiation of selected deposits of nonclay aluminous minerals in the Western States that can be used to enrich offgrade plastic fireclays for the production of superduty firebrick, (4) development of reserves of materials for producing lightweight aggregates in present areas of shortage, (5) the sampling and testing of impure halloysite deposits, the development of treatment processes for their utilization, and studies on standardization of testing techniques.

All of these projects will aid in the economic development of regions that now are being retarded by lack of adequate clay raw materials. The Bureau of Mines research will provide the basic data needed to encourage private industry to plan and carry out the expansion necessary.

Phosphate Rock

To furnish sufficient food for a rapidly growing population, farmers will be required to apply ever-increasing quantities of fertilizer to the soils because a large acreage of additional land is not available for cultivation. To meet this demand

for fertilizer, larger and larger tonnages of phosphate rock will be required each year. Since transportation constitutes a large part of the fertilizer cost, materials near the consumption areas should be utilized to the fullest extent. Thus, the western phosphate deposits of Idaho, Montana, Wyoming, and Utah should supply more of the nearby markets than they do at present.

In addition to constituting the world's largest reserves of phosphate rock, the Phosphoria formation in the western field contains important quantities of fluorine, vanadium, chromium nickel, and molybdenum. To encourage development of western phosphate deposits, the Department of the Interior initiated an intra-bureau coordinated program in 1947. Bureau of Mines participation includes process development to permit utilization of lower grade phosphate rock deposits and recovery of valuable byproducts.

Because the proportion of high-grade phosphate rock (31 percent or more P_2O_5) in the western field is small, manufacture of superphosphates for high-analysis chemical fertilizers from western deposits is limited. The Bureau of Mines has made a start on the development of beneficiation methods to eliminate silicates, carbonates, and other objectional impurities from western phosphate rock. Progress has indicated that silicates can be removed by flotation but no satisfactory method has been found to eliminate the carbonates.

Additional beneficiation research is needed and planned by the Bureau of Mines to upgrade western phosphate rock to the necessary P_2O_5 content. As larger quantities of phosphate rock are used for processing, larger quantities of valuable byproducts will become available for recovery.

Kyanite (Mullite)

Modern industry requires a variety of refractory materials to meet its diverse requirements. Special refractories are required to withstand high operating temperatures, sudden temperature changes, and contact with molten metals and slags. Mullite refractories are especially useful in the ceramic, cement, metallurgical, and glass industries, and in high-temperature boilers. These uses account for more than 90 percent of the domestic consumption of mullite refractories. When minerals of the sillimanite group (kyanite, andalusite, sillimanite, and dumortierite) are heated to temperatures ranging from 1,000° to 1,650° C. they break down to yield mullite and free silica. Mullite is stable up to 1,810° C. Most of the commercial kyanite-mullite refractories are derived from Indian kyanite as the main constituent. Changing political and economic conditions in India have caused concern in the United States regarding future kyanite supplies. To date exploration has not disclosed adequate domestic sources of suitable mullite-forming minerals. Because of these factors the development of synthetic mullite was undertaken by the Bureau of Mines as the best means for fulfilling future superdutý refractory needs. Fused and sintered synthetic mullite have been produced successfully utilizing siliceous bauxite and other materials which occur in ample quantities in the Southeastern United States.

As a result of the Bureau of Mines research at the Norris, Tenn., Electrotechnical Laboratory, the United States is assured of eventual self-sufficiency in mullite refractories. However, much work still remains. Selected compositions must be prepared and evaluated. Raw material sources must be sampled and analyzed, reserves delineated, and specifications established. The Bureau of Mines immediate program calls for continuation of research on mullite refractories until dependence on uncertain foreign supplies ceases.

Mr. Forbes. They are doing a grand job at Norris, Tenn., on this. I was down there last October, and it was surprising to me to see the tremendous progress they have been making on this synthetic mica, and they are making all kinds of products out of it right in our laboratories.

Mr. Zinner. May I mention just one other thing? In the case of talc, which, as you see, does not appear in our budget this year, we have gone through the research cycle, and we feel that we will soon be out of the business of working on synthetic talc.

There is a statement on that in here.

(The matter referred to follows:)

TALC

(Substitutes for natural block talc)

A BUREAU OF MINES ACCOMPLISHMENT

Block steatite talc is a special variety of very fine-grained or cryptocrystalline talc possessing desirable chemical and physical properties, as follows: Less than 1.5 percent CaO, less than 1.5 percent Fe_2O_3, less than 4.0 percent Al_2O_3, low fired shrinkage, suitable white color after firing, good thermal resistance, high fired strength, low absorption, and good machinability. Natural block steatite has been mined in India, Sardinia, and during World War II in one mine in Madison County, Mont. Indian block steatite talc has been the standard of quality for electronic insulators manufacture; Sardinian talc can be used for most applications except high-frequency insulators; Montana talc has only very limited application. Intensive search during World War II failed to disclose any other likely productive areas, either in the United States or abroad. Natural block steatite talc requires much hand labor in preparation. Selection of suitable block at the mine is difficult and rejections at the point of manufacture have ranged as high as 50 to 70 percent.

During World War II, block steatite talc remained in extremely short supply despite all methods used to augment supplies. Firms manufacturing machined electronic insulators and tube spacers from block talc operated on a hand-to-mouth basis. Price increases were granted to Indian mine operators to encourage greater production, shipments were expedited by utilizing first-class passenger trains at passenger rates in India and air transportation to the United States during a period when air travel was under high priority.

Since World War II, drypressed and extruded ground steatite ceramics have replaced machined block steatite talc for most applications but a small demand still exists for certain highly strategic electronic parts. Research to produce built-up (reconstituted) block steatite talc was initiated by the Bureau of Mines after the outbreak of hostilities in Korea in order to make the United States completely independent of foreign talc supplies that might become unavailable during emergencies.

In the presentation to Congress, Department of Interior, Justifications for Appropriations, Fiscal Year ending June 30, 1953, page BM 42 the following statement was made:

"Some of the laboratory bodies now being prepared show definite promise. By 1953 fiscal year, bodies should be produced in quantity so that commercial scale tests can be made * * *."

At present a product has been perfected through the cooperative action of the Bureau of Mines and a private company, and a joint report is in preparation. The manuscript is expected to reach the Washington office sometime in February. The product, made by phosphate bonding of ground steatite talc and a suitable filler, has shrinkage and electrical properties comparable to those of block steatite talc. The product now is being sold commercially, and is highly acceptable. Fabricating and firing losses of about 5 percent are indicated, compared with losses of about 50 percent for natural block talc.

A machinable hot-pressed synthetic mica block has been developed as a byproduct of synthetic mica research, at Norris, Tenn., that has suitable electrical properties to be used as a substitute for natural block talc.

Thus, two products have been synthesized through research to bring the United States one step closer to its goal of self-sufficiency in critical and strategic commodities.

MINERALS RESEARCH, UNCLASSIFIED

Mr. FENTON. Now, the next item is minerals research, unclassified. Insert in the record the table appearing on page 54.

(The matter referred to follows:)

Minerals research, unclassified

Subactivity	1953 appropriation	Decreases	1954 base	1954 estimate	Increases
(1) Minerals research, unclassified	$410,601		$410,601	$475,601	$65,000
(2) Arkansas-White and Red River surveys	317,000	$56,712	260,288	260,288	
(3) New England-New York mineral surveys	188,253		188,253	188,253	
(4) Rogue River survey				42,000	42,000
Total	915,854	56,712	859,142	966,142	107,000

Mr. FENTON. You are asking for an increase of $107,000 in those items. Will you explain those briefly? You are asking for an increase of $65,000 for mineral research, unclassified, and $42,000 for the Rogue River survey.

Mr. ZINNER. No matter how hard we try, this function always sounds like gibberish when it appears in the budget, for some reason or other. Actually it is a productive operation and one that we can measure in some positive benefits.

It has to do, amongst other things, with the instrumentation of rock movement, primarily the removal of pillars in mines with some assurance that we know what is going to happen. It has been applied successfully in the tri-State zinc field where with the use of such instrumentation many pillars were removed, and many thousands of tons of high-grade ore were extracted.

Mr. FENTON. This stuff is mined, just the same as in the coalfields.

Mr. FORBES. On the same order, except that there has been very little of this done on coal. It has been employed mostly in the mines of upper Michigan and in the tri-State district of Missouri, Kansas, and Oklahoma. Have they not gone out into the far West to some extent?

Mr. ZINNER. It was a major operation in determining the prescribed mining system for the shale at Rifle, Colo.

Mr. FORBES. That is right.

Mr. ZINNER. I think the easiest way to describe this particular process is to say that it detects subaudible noises in rock and predicts rock movement.

This is only one small phase of the whole operation we are apeaking of, but the theory has been applied to anticipating rockbursts in the Michigan mines. We have had any number of situations that require the work described in this function. This increase will permit the proper expansion of this function which has been more or less static over a number of years. We feel it should be greatly expanded.

Mr. FENTON. Have you made any accomplishments with the money which was given you in the past along this line?

Mr. ZINNER. I think that the major accomplishment was in the extraction of pillars. Almost 70 percent of the current effort is financed and is done for the military. We worked with the Corps of Engineers, for example, on the jobs related to the diversion of the Missouri River at the major dams now under construction. The Engineers and the contractors were greatly concerned about the

effects of blasting during construction operations, and this work was very valuable there.

We also participated in the simulated bombing of underground structures which was conducted in Utah last year. This was instrumented by this group. There are any number of instances of that kind, which are cooperative with the military, industry, and also with our other projects.

Mr. FENTON. That is fine.

Mr. FORBES. There is only one comment that I would like to make in connection with that. We have a man by the name of Dr. Obert in charge of this work. Of course, he has some assistants, but he is highly qualified for this work. I wish we had three or four more persons with his ability. It would be very beneficial not only to the metal industry, but I know he could be of great help to the coal industry.

Mr. ZINNER. I have a very short formal statement on that if you would care to use it, Mr. Chairman.

Mr. FENTON. All right.

(The matter referred to is as follows:)

APPLICATION OF PHYSICS TO MINING

A major phase of this program is the analysis of mine structures. Much of this is done by means of microseismic field tests at operating mines in cooperation with mining companies. The results indicate the stability of cap rock and pillars, the rate of ground movement, and the occurrence of minute-scale rockbursts.

Another phase of this program involves the determination of physical properties of rock in mines and exploratory projects to correlate one or another of these properties with particular mining characteristics of the rock. Using a series of 15 standardized tests, over 200 rock types have been tested to date. Last year 12 tests were completed; 9 physical property reports were prepared, and 10 more were in progress. In addition to these more routine tests, several special investigations were conducted, including the determination of the physical properties of hydrostone (a high-strength gypsum cement).

Several other special investigations were conducted, including the study of the application of roof bolts to mines, other than coal, and study of the effect of vibrations produced by blasting.

Almost all of the complicated instruments used in this research program have been designed and constructed by the Bureau of Mines in its own laboratories. These include microseismic equipment for measuring the minute vibration waves that are set up by movement in mine rocks. A fundamental investigation is currently under way to study the possibility of developing a portable electronic roof-testing device for locating sections of "loose" mine roof.

ROGUE RIVER SURVEY

Mr. ZINNER. The other increase in that item has to do with the Rogue River survey.

That is part of the departmental program, undertaken at the Department's request as part of a comprehensive resources survey in the Rogue River Basin. It is a 1-year item. It is to permit us to make an evaluation and survey of the mineral resources in the Rogue River drainage.

Mr. FENTON. You are just starting this survey?

Mr. ZINNER. Yes, sir; we are just starting this survey. It will take only one year.

Mr. FENTON. All right.

Control of Fires in Inactive Coal Deposits

Now we come down to the item control of fires in inactive coal deposits. Can you give us any good reason why that should continue?

Mr. Forbes. Yes, sir. I want to say that is a real program, and it certainly has paid off.

There have been something on the order of 26 fires which have been controlled, or are in the process of being controlled, and some of them were pretty tough fires. The tons of coal which were saved as a result of this are well over the 200 million mark. That does not say anything if those fires had continued or expanded about the other millions of tons more of coal that would have been destroyed.

Mr. Fenton. Yes.

Mr. Forbes. I have these illustrated books here, and I am going to place them at the disposal of this committee. I think inasmuch as this project was initiated by yourself, Dr. Fenton, and the chairman, Mr. Jensen, I know it will be illuminating to you to find out just what we are doing in connection with these mine fires. The control of these fires has cost the Government less than 1 cent a ton.

Mr. Fenton. I think we know something about that, Doctor.

Mr. Forbes. I do want to place this in the record at your disposal. When you are through looking at them you can return or keep them. This is anthracite, and this is bituminous.

Mr. Fenton. I do want you to place in the record at this point a statement on that.

Mr. Forbes. I want to say that on each individual fire we are making a separate report for our records and any time you want a report on a particular fire we have it for you.

Mr. Fenton. I want you to put in the record at this point just what you have been telling us, just how much coal has been saved and how much money it has taken to save it, that it has taken less than one cent a ton to save it, and the amount of money that coal is worth at current prices.

Mr. Forbes. Just take that; that is my statement on it.

Mr. Fenton. We will include page 58 of the justifications in the record at this point.

(The matter referred to follows:)

Control of fires in inactive coal deposits

Control of fires:	
Appropriation 1953	$354, 925
Base, 1954	354, 925
Estimate 1954	354, 925

During the past 5 years, 26 mine fires have been controlled or are being controlled, primarily with funds of this appropriation. Thirteen of these fires were on the public domain in Colorado, Wyoming, and New Mexico, all financed by the Federal Government; 13 were on private property in Pennsylvania, and 1 in West Virginia, of which the Federal Government financed two-thirds of the cost. At a cost of less than 1 cent a ton, more than 214 million tons of coal have been saved from fire as a result of this program during the past 5 years. At current market prices, it is estimated that this coal would be worth over $856,000,000 when mined.

No action has been taken to control 83 other fires verified by Bureau engineers, but they should be controlled when funds are made available. In widely scattered areas of the country, some of these fires in inactive coal deposits have been burning

for a generation or more, consuming valuable coal, threatening buildings and lands, and menacing the health and safety of nearby residents.

Mr. FORBES. It is a very good program.

Mr. FENTON. You have done a very good job on that.

Mr. FENTON. You made a statement about the number of fires that you have. Is that in that statement?

Mr. FORBES. That is in that statement.

Mr. FENTON. Show them by areas and what States they are in too, and where they are located.

Mr. FORBES. We will be glad to do that.

(The matter referred to follows:)

TABLE 1.—*Completed mine-fire-control projects, July 1949–December 1952*

Name of fire	Location	Land	Date completed	Cost	Estimated tons of coal conserved	Remarks
I. H. I	Rifle, Colo	Public	July 1949	$39,867	1,600,000	
Lloydsville	Latrobe, Pa	Private	do	9,501		Valuable industrial and residential property saved.
Cook Plan	Monessen, Pa	do	do	18,454		High school and residential property saved.
Lick Run	Bruceton, Pa	Public and private	September 1949.	40,452	2,000,000	Fire threatened public property and private coal lands.
North Park	Coalmont, Colo	Public	October 1949	55,751	12,000,000	
Peach Mountain	Pottsville, Pa	Private	do	30,529	2,000,000	
Moyer Gulch	Gillette, Wyo	Public	May 1950	39,461	6,000,000	
Fairmont	Fairmont, W. Va	Private	July 1950	15,000		Valuable residential property endangered.
Canfield	Tecla, Wyo	Public	August 1950	75,736	15,000,000	
Laur	Gillette, Wyo	do	September 1950.	6,581	5,000,000	
Shamokin	Shamokin, Pa	Private	October 1950	4,854		3 cemeteries endangered.
Burning Mine	Bill, Wyo	Public	December 1950.	54,690	20,000,000	
San Juan	La Ventana, N. Mex	do	March 1951	32,996	3,000,000	
Kulpmont	Kulpmont, Pa	Private	May 1951	85,840		High school and residential property endangered.
Ross Farm	Monessen, Pa	do	July 1951	3,000		Residential section endangered.
Little Thunder	Hilight, Wyo	Public	September 1951.	47,533	20,000,000	
Pyle	Fruitland, N. Mex	do	do	14,498	5,000,000	
Padlock	Gillette, Wyo	do	do	42,880	15,000,000	
Skull Creek	Craig, Colo	do	December 1951.	17,434	2,500,000	
Carbondale	Carbondale, Pa	Private	February 1952	160,721	10,000,000	Large section of city endangered.
Pricedale	Pricedale, Pa	do	October 1952	44,085		
Mount Carmel	Mount Carmel, Pa	do	do	203,271		Do.
Dugger-Rollins	Delta County, Colo	Public	do	49,776	25,000,0000	
Bigelow Blvd	Pittsburgh, Pa	Private	December 1952.	30,000		Endangered large housing development.
Elk Creek	Campbell County, Wyo	Public	do	42,094	11,000,000	
Tower City	Tower City, Pa	Private		115,000	35,000,000	This project will be completed during fiscal year 1953.

TABLE 2.—*Proposed mine fire-control projects, fiscal year 1954*

Name of fire	Location	Land	Cost
Homer	Homer, Alaska	Public	$15,000
Moose Creek	Healy River, Alaska	do	10,000
East Quitchingpaw	Emery County, Utah	do	45,000
Snake River	Wyoming	do	87,000
Black Diamond	do	do	68,000
Old Forge	Old Forge, Pa	Private	90,000

TABLE 3.—*Bureau of Mines record of fires in inactive coal deposits*

PENNSYLVANIA

Name of fire	Location of fire	Estimated cost to control	Remarks
Glassport outcrop	Borough of Glassport, Allegheny County	$60,000	In sparsely populated area but could spread to dense one.
West Wilmerding outcrop	West Wilmerding, North Versailles Township, Allegheny County.	43,000	Fire near residential district of 70 to 80 homes.
Monessen [1]	Monessen, Westmoreland County	20,000	Many homes and a school in vicinity of fire. Several fires involved.
Abandoned coal mine	Moon Township, Allegheny County	10,000	Fire menacing nearby homes and lives and health of inhabitants.
Do	Between West Elizabeth and Large in Allegheny County	750,000	Fire burning 50 years or more, reducing property values and menacing lives and health.
Do	Near Turtle Creek, Allegheny County		Occupants of caretaker's home in cemetery hospitalized by fumes from fire.
Glass Run	Churchview Ave., Baldwin Township, Allegheny County	20,000	Active fire near residential district and menacing small coal-mine operation.
Outcrop	Near Wilkinsburg, Allegheny County		Active fire eventually will affect valuable residential district.
Outcrop of abandoned coal mine	Kennedy Township, Allegheny County		Over $50,000 spent to control fires and protect county road. Fire menaces lives and nearby residences.
Imperial	Imperial, Allegheny County	20,000	Public school 300 feet away menaced.
West Mifflin	West Mifflin Borough, Allegheny County	80,000	Houses very near to fire.
Carnot	Carnot Allegheny County	5,000	
McKeesport	McKeesport, Allegheny County	20,000	50 houses endangered.
Pittsburgh	Wylie and Herron Aves., Pittsburgh, Allegheny County	26,000	Densely populated district.
Daiseytown	West Pike Run Township, Washington County	25,000	3 houses engangered.
Grandview	Between Donora and Charleroi, Washington County	20,000	Houses within 300 feet of fire.
Smith Township	Smith Township, Allegheny County	80,000	Houses nearby endangered.
Donora	Donora, Washington County	10,000	
Mount Braddock Mine	Mount Braddock, Fayette County	60,000	5 million tons of coal endangered.
Smithfield	Smithfield, Nicholson Township, Fayette County	50,000	
Masontown	Masontown, Nicholson Township, Fayette County	320,000	2 million tons of coal and many houses endangered.
Clarissa Mine	Vanderbilt, Fayette County	35,000	
Ferguson and Hill Farm Mines	Dunbar, Fayette County	50,000	
Wheeler Mine	Connellsville, Fayette County	23,000	
Puritan Mine	Near McClellandtown, Fayette County	5,000	
Catfish Run	Near Library, Allegheny County	50,000	Menaces Gould development project.
Experimental mine [1]	Bruceton, Allegheny County	40,000	Bureau of Mines experimental mine, research laboratories and explosives testing station menaced.
Lloydsville [1]	Near Latrobe, Westmoreland County	12,000	75 houses, industrial plant, and main line Pennsylvania R. R. menaced.
Jefferson Township	Jefferson Township, Allegheny County	12,000	Endangers several homes.
Edgewood Dr	O'Hara Township, Allegheny County		Densely populated district.
Agnee Rd	Baldwin Township, Allegheny County		High school and numerous homes endangered.
Adah	Lake Lynn, Allegheny County		
Ardmore Boulevard	Wilkinsburg, Allegheny County		

Arnoni	Jefferson Township, Allegheny County		
Peterman's Corners	Penn Township, Allegheny County	$13,000	Many houses menaced.
Sanda Drive	Sanda Drive, Baldwin Township, Allegheny County		Fire menaces 2 radio transmission towers and several houses.
Abandoned coal mine	Borough of Greentree, Allegheny County	10,000	If unchecked, fire will endanger Greentree Tunnel of Pittsburgh and West Virginia Railroad.
Hockburg Ave	Penn Township, Allegheny County	10,000	Active fire in abandoned mine workings will endanger residential district.
Pricedale [2]	Westmoreland County		Fire will endanger high school and residential area.
Hope Hollow Rd	Allegheny County		Fire near residential area.
Penn Township	do		Fire in abandoned mine menaces several residences.
Green Valley	North Versailles Township, Allegheny County		Fire endangers large housing project.
Boston	Lincoln Township, Allegheny County		Fire endangers school building and several houses.
Old Frame	Fayette County		Fire being controlled by property owners and State.
Burgettstown	Washington County		Extensive fire menaces large residential district.
Mount Carmel [3]	Mount Carmel Township, adjoining the Borough of Mount Carmel.	135,000	10 double dwellings and occupants menaced; 5 million tons of anthracite endangered.
Carbondale [3]	West side of city of Carbondale, Lackawanna County	242,000	Fire in abandoned strip pit; menace to health, and 10 million tons of anthracite endangered.
Kulpmont [3]	Kulpmont, Northumberland County	105,000	High-school building and other property endangered.
Braddock	Braddock, Allegheny County		Residential section endangered.
Old Forge	Old Forge, Lackawanna County		Fire near residential section.
Campania St	Pittsburgh, Allegheny County		
Duquesne Heights	do		
Finley Ave	Scott Township, Allegheny County		
Forest Hills Borough	Allegheny County		
Hoffman Rd., Extension	Mount Troy Reserve Township, Allegheny County		
Irvin Works	Dravosburg, Allegheny County		
New Derry	New Derry, Westmoreland County		Outcrop fire.
Churchview Ave	Baldwin Township, Allegheny County		Residential section endangered.
Bigelow Blvd	Pittsburgh, Allegheny County		Do.
Shamokin [4]	Shamokin, Northumberland County	12,000	Several cemeteries endangered.
Dragondale	Near Borough of Atlas about 1 mile west of Mount Carmel, Northumberland County.		About 1½ million tons of anthracite have been destroyed and about $400,000 spent to extinguish the fire.
Tower City Mine [3]	About 1 mile north of Reinerton in Schuylkill County		Fire started in "bootleg" mine; 3 million tons of anthracite endangered.
Peach Mountain [1]	Pottsville, Schuylkill County	30,000	2 million tons of anthracite endangered.
Lamar St	Pittsburgh, Allegheny County		Residential district endangered.
Lobuta Rd	Penn Township, Allegheny County		
Mays Mine	Lincoln Township, Allegheny County		
Nelson St	Pittsburgh, Allegheny County		
Park Ave	Braddock Hills Borough, Allegheny County		
Yost	Pittsburgh, Allegheny County		
Nicholas	Smithfield, Fayette County		
Shoaf	Shoaf, Fayette County		
Uledi	South Union Township, Fayette County		
Gastonville	Gastonville, Fayette County		
Patterson's Crossing	Smith Township, Washington County		
Larimer	North Huntingdon Township, Westmoreland County		

See footnotes, p. 672.

TABLE 3. *Bureau of Mines record of fires in inactive coal deposits*—Continued

OHIO

Name of fire	Location of fire	Estimated cost to control	Remarks
Sand Run outcrop	About 5 miles south of New Straitsville, Hocking County	$500,000	Destroying vegetation and reforested land nearby and partly mined coal.
New Straitsville outcrop	About ½-mile southeast of New Straitsville, Hocking County.	550,000	Will endanger reforested land, some dwellings, and oil wells in vicinity.
Bellaire	Belmont County	6,000	Houses endangered.
Carbon Hill	Hocking County		Fire burning in abandoned mine workings endangers town of Nelsonville.
Salem Hollow	do		Extensive outcrop fire.
Carol No. 2	Guernsey County		
Old Gore	Hocking County		
Grimm mine	Tuscarawas County		

MARYLAND

Frostburg	Allegheny County	$1,500,000	Large coal acreage involved.

WEST VIRGINIA

Maidsville No. 1	Maidsville, Monongalia County	$75,000	5 houses endangered.
Fairmont [3]	Marion County	20,000	Endangered much valuable city property.
Maidsville No. 2	Maidsville, Monongalia County	100,000	
Fairmont	Fairmont, Marion County	15,000	1 house endangered.
Jordan mine	Marion County	50,000	Coal reserves endangered.
Mona mine	Monongalia County	400,000	Do.
Mona-McCartney mine	do	300,000	Do.
Opekiska mine	do	25,000	
Osage mine	do	5,000	
Carbon Fuel Co. mine	Kanawha County		
Millerville	Marion County		
Byrne	Monongalia County		
Morgan Mine	Reedsville, Preston County		

COLORADO

Outcrop fire [1]	About 7 miles northeast of Rifle in Garfield County	$38,000	Fire endangered 4,500,000 tons of coal on public domain, destroyed tipple of new I. H. I. mine and caused abandonment of new mine.
Skull Creek Mine [4]	Near Rangely	15,000	2½ million tons of coal on public domain endangered.
Dugger-Rollins [3]	Approximately 6 miles south of Battlement National Forest, near Delta.	20,000	Fire burning in outcrop on public domain; 25 million tons of coal endangered.
North Park outcrop [1]	Near Coalmont, Jackson County	57,000	12 million tons of coal on public domain endangered.
Wisconsin Mine	Moffatt County	25,000	2 million tons of coal on public domain endangered.
Wise Hill No. 1	Near Craig, Moffatt County	25,000	Do.
Newcastle	Hogback area near Newcastle	50,000	10 million tons of coal on public domain endangered.
Minnesota Creek	Paonia		
Coal Gulch	Fruita		
Sunlight Mine	Red Stone		
Dry Creek	Cedaredge		
Rowland	Hotchkiss		
Current Creek	Cedaredge		
Low Creek	Ridgeway		
Harvey Gap	Silt		
Owens Mine	Cedaredge		
Dragon	Atchee		
Slagel	Cimarron		
Stanley Mine	Rangely		

MONTANA

Otto Frank outcrop	About 7 miles east of Bloomfield, Dawson County	$25,000	3 million tons of coal endangered.
Fuller outcrop	About 13 miles west of Savage and 30 miles north of Glendive, Dawson County.		Fire reported smoldering in 30-foot lignite bed.
Reservation Creek	Tongue River Indian Reservation		Fire in 22-foot coal bed has been burning since 1922, on public domain.
Outcrop fire	Ashland		Fire endangers valuable coal bed and range lands.
Bay Horse	Bay Horse		On public domain.
Roundup	Roundup		Do.
Alexander	Sidney		On State land.

UTAH

Abandoned coal mine	In vicinity and west of Scofield		Fire burning about 50 years on old Union Pacific Coal Co. lease.
Outcrop fire	Near Alton, Kane County	$2,000	On public domain.
East Quitchingpaw	Emery County		Do.
West Quitchingpaw	do		Do.
Smoky Mountain	Kane County		Do.
Wellington	Price County		Do.

See footnotes at end of table, p. 00.

TABLE 3.—*Bureau of Mines record of fires in inactive coal deposits*—Continued

Name of fire	Location of fire	Estimated cost to control	Remarks
NEW MEXICO			
San Juan [4]	Near La Ventana	$35,000	3 million tons of coal on public domain endangered.
Pyle [4]	Fruitland	15,000	5 million tons of coal on public domain endangered.
La Plata	La Plata		
Peacock	La Ventana		
WYOMING			
Fire hole outcrop [4]	Little Thunder Basin, near Hi-Light	$100,000	20 million tons of coal on public domain endangered.
Laur [4]	Near Gillette	7,500	5 million tons of coal on public domain endangered.
Canfield [3]	Near Teckla	212,000	15 million tons of coal on public domain endangered.
Hay Creek	Near Gillette, Campbell County	50,000	5 million tons of coal on public domain endangered.
Elk Creek	do		On public domain.
Coal Gulch	do		Do.
Moyer Gulch outcrop [1]	About 13.5 miles north of Gillette, Campbell County	74,000	6 million tons of coal on public domain endangered.
Verse	Near Verse	100,000	12 million tons of coal on public domain endangered.
Padlock [4]	Near Gillette, Campbell County	43,000	15 million tons of coal on public domain endangered.
Company	Savery	25,000	5 million tons of coal on public domain endangered.
Snake River	do	25,000	4 million tons of coal on public domain endangered.
Burning Coal [4]	Bill	50,000	20 million tons of coal on public domain endangered.
Dead Horse No. 1	Gillette, Campbell County		On public domain.
Dead Horse No. 2	do		Do.
Miller Mine	Como		Do.
Tongue River	Sheridan		Do.
Buffalo Lease	Buffalo		Do.
Pine Bed	Rawlins		Do.
Shirley	Hanna		Do.
Appel	Gillette		Do.
Morrison	Buffalo		Do.
Robertson Range	Douglas		Do.
Blue Diamond	Gillette		Do.

[1] Fire control project started during fiscal year 1949.
[2] Fire control projects scheduled for 1952.
[3] Fire control project started during fiscal year 1950.
[4] Fire control project started during fiscal year 1951.

NOTE.—Where the estimated cost is not listed the investigation has not been completed.

Mr. FENTON. What is the status of the Mount Carmel fire?

Mr. WESTFIELD. The Mount Carmel fire project is almost complete. There is quite a bit of maintenance on the Mount Carmel fire and it may break out at other points, but it is fairly well under control at the present time. Most of the present work is maintenance, and it is being taken care of. That is one of the worst fire-control projects we have had.

Mr. FENTON. You are not asking for an increase this year for that project?

Mr. FORBES. No, sir; we are satisfied to go along on what we have, because that is just about all we can handle with the present force.

HEALTH AND SAFETY

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
1. Investigation of accidents and rescue work	$845,414	$849,370	$850,000
2. Mine inspections and investigations	2,713,921	2,721,440	4,125,000
3. Explosives and explosions testing and research	498,810	509,190	555,000
Total obligations from appropriated funds	4,058,145	4,080,000	5,530,000
Reimbursements from non-Federal sources:			
4. Replacement of personal property sold	1,071	1,071	1,071
Total direct obligations	4,059,216	4,081,071	5,531,071
Obligations Payable Out of Reimbursements From Other Accounts			
1. Investigation of accidents and rescue work	2,128	6,000	6,000
2. Mine inspections and investigations	1,789	5,000	5,000
3. Explosives and explosions testing and research	1,257	29,000	29,000
Total obligations payable out of reimbursements from other accounts	5,174	40,000	40,000
Obligations incurred	4,064,390	4,121,071	5,571,071

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions	705	706	875
Full-time equivalent of all other positions	7	6	7
Average number of all employees	666	668	841
Average salaries and grades:			
General schedule grades:			
Average salary	$5,292	$5,357	$5,427
Average grade	GS-8.0	GS-8.0	GS-8.2
Crafts, protective, and custodial grades:			
Average salary	$2,836	$2,893	$2,970
Average grade	CPC-3.2	CPC-3.2	CPC-4.1
Ungraded positions: Average salary	$3,833	$3,833	$3,833
Personal service obligations:			
Permanent positions	$3,467,972	$3,532,222	$4,489,623
Part-time and temporary positions	36,389	29,200	29,200
Regular pay in excess of 52-week base	13,490	13,239	13,580
Payment above basic rates	12,899	12,008	12,360
Total personal service obligations	3,530,750	3,586,669	4,544,763
Direct Obligations			
Appropriated funds:			
01 Personal services	3,527,564	3,556,669	4,514,763
02 Travel	168,405	176,060	332,000
03 Transportation of things	13,629	12,547	32,700
04 Communication services	12,015	10,945	40,500
05 Rents and utility services	8,096	7,100	82,100
06 Printing and reproduction	19,470	43,300	76,700
07 Other contractual services	56,242	47,256	121,500
08 Supplies and materials	147,200	135,373	223,100
09 Equipment	101,193	87,005	102,937
13 Refunds, awards, and indemnities	1,171	500	500
15 Taxes and assessments	3,160	3,245	3,200
Total obligations from appropriated funds	4,058,145	4,080,000	5,530,000
Reimbursements from non-Federal sources:			
09 Equipment	1,071	1,071	1,071
Total direct obligations	4,059,216	4,081,071	5,531,071
Obligations Payable Out of Reimbursements From Other Accounts			
01 Personal services	3,186	30,000	30,000
08 Supplies and materials	1,988	7,000	7,000
09 Equipment		3,000	3,000
Total obligations payable out of reimbursements from other accounts	5,174	40,000	40,000
Obligations incurred	4,064,390	4,121,071	5,571,071

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$431,677	$410,192	$397,192
Obligations incurred during the year	4,064,390	4,121,071	5,571,071
Total obligations	4,496,067	4,531,263	5,968,263
Deduct:			
Reimbursable obligations	6,245	41,071	41,071
Adjustment in obligations of prior years	4,401		
Unliquidated obligations, end of year	410,192	397,192	577,192
Total expenditures	4,075,229	4,093,000	5,350,000
Expenditures are distributed as follows:			
Out of current authorizations	3,675,765	3,708,000	4,970,000
Out of prior authorizations	399,464	385,000	380,000

Mr. FENTON. We now come to health and safety.

Mr. FORBES. We made quite a statement with respect to the reasons why we wanted these funds when we appeared before this committee on the supplemental appropriation for fiscal year 1953, but we would be very happy to go over it again.

Mr. FENTON. We will insert pages 62, 64, and 65 of the justifications in the record and also the tables on pages 69 and 70.

(The matter referred to follows:)

Analysis by activities

Activities	Appropriation, 1953	Decreases	Base, 1954	Estimate, 1954	Increases
1. Investigation of accidents and rescue work	$849,370		$849,370	$850,000	$630
2. Coal mine inspections and investigations	2,721,440		2,721,440	4,125,000	1,403,560
3. Explosives and explosions testing and research	509,190		509,190	555,000	45,810
Total	4,080,000		4,080,000	5,530,000	1,450,000

Statement of accomplishments, fiscal year 1952

Type of program	Number trained in 1952 fiscal year	Cumulative total trained to date	Years of training	Remarks
Safety and accident prevention training and instructions:				*Industries involved*
1. First-aid instructions	33,722	1,741,810	42	Coal and metal mining, cement, quarrying, metallurgical, petroleum, nonmetallic mining, etc.
2. Mine rescue methods	2,306	100,231	42	
3. Metal mine accident:				
Prevention	1,019	6,567	11	First offered in 1941.
Partial completion	401	2,064	11	
4. Petroleum-gas accident:				
Prevention	206	2,239	13	
Partial completion	515	3,414	13	

	Attendance in 1952 fiscal year	Cumulative to date	Total number of meetings	Remarks
Exhibits and demonstrations:				
1. "The Magic of Fire"	40,639		214	This lecture and demonstration on the flammability of gasoline vapors shown in 26 States.
2. First-aid and mine-rescue contests.	81,760		49	752 teams participated.
3. Safety meetings	132,101		1,047	
4. Sound motion pictures, exhibits, and demonstrations covering various phases of safety and accident prevention.	77,084		934	

NOTE.—4 major mine explosions occurred during fiscal year 1952, resulting in 147 fatalities. 16 minor explosions occurred with 13 fatalities resulting therefrom. These explosions were investigated as were 26 mine fires in which no lives were lost.

Laboratory investigations of electricity in mining

Approvals granted for new mining electrical machinery	76
Tests of mine training cables for flame resisting qualities	13
Special investigations for Navy Department to reduce fire and explosion hazards from petroleum vapors	Continuous

Health

Mine air samples analyzed	14,000
Airborne dust samples collected and analyzed	1,000
Approval of new respiratory breathing apparatus	3
Extension of approval, respiratory protective devices	25

Supporting research, activities, increase $65,000

Pioneering research by the Bureau of Mines has contributed immeasurably to the great reduction in coal mine explosions during the past 40 years, resulting in a decrease of fatalities from about 3,500 during the first decade to about 700 during the most recent decade of this century. The problem, however, is so complex and so important that if the fundamental intent of the Congress to prevent major disasters is to be achieved, supporting research activities now being conducted by the Bureau must be expanded to provide reliable technical and scientific data as to the causes and development of explosions and the most effective measures for their prevention under the circumstances encountered. Economic aspects are seriously involved in any drastic action taken to order the withdrawal of workmen from a mine and must be supported by incontrovertible facts to avoid repercussions that might develop. These activities are designed to provide the answers as to what constitutes "imminent danger" and the safe practical procedures to be followed in the enforcement of safe mining practices under a multitude of diverse conditions and problems in the thousands of coal mines throughout the Nation.

The following statistical tables present information as to the number of inspections made to date and indicates also the accident prevention educational work accomplished through the research activities of the Bureau in the training of the personnel required.

Coal-mine inspections, fiscal year 1952, according to employment

Underground mines employing less than 25 men	4,957
Underground mines employing 25 and more men	3,208
Strip mines	528
Total inspections	8,693

Number of inspections, fiscal years 1948–52

Fiscal year	Number of mines inspected first time	Number of mines re-inspected	Total number of inspections
1948	414	4,247	4,661
1949	1,779	4,895	6,674
1950	2,184	5,999	8,183
1951	1,810	7,161	8,971
1952	1,631	7,062	8,693

Average annual inspections per coal mine fiscal year 1952

Underground mines employing less than 25 men	1.3
Underground mines employing 25 and more men	1.8
Strip mines	1.1
Average, all mines	1.4

Injuries in coal mines of the United States, 1942–52

Calendar year	Injuries	
	Fatal	Nonfatal
1942	1,471	66,774
1943	1,451	64,594
1944	1,298	63,691
1945	1,079	59,350
1946	974	56,800
1947	1,165	58,200
1948	1,015	54,100
1949	593	36,500
1950	637	37,235
1951	[1] 790	37,640
1952 (10 months)	[1] 465	

[1] Estimated.

Accident prevention educational work, field

	Number trained, fiscal year 1952	Total number trained
Training of coal-mine supervisors (started February 1948)	3,284	15,560
Accident-prevention training for mine workmen (started January 1947)	24,294	59,126

SUPPORTING PERSONNEL

Mr. FENTON. Mr. Forbes, the increases for inspections cover the same items that were requested in the supplemental now pending. However, if there are further items included, explain them.

Mr. FORBES. This is for the total of 75 inspectors, Doctor.

Mr. FENTON. That is the original, formal request?

Mr. FORBES. Yes, sir; that is right. Starting the 1st of July of 1953, we are asking for 75 inspectors.

There is one thing that I would like to mention, if you do not mind, Mr. Chairman, and that is the supporting personnel. In the supplemental, of course, Congress approved 50 inspectors, 12 mining engineers, and 13 electrical inspectors but gave us no supporting personnel. Probably it was the intent of Congress when we came to support our regular 1954 fiscal year estimates, that they would give us some supporting personnel.

Mr. FENTON. Are you referring to the supporting personnel that we cut out in the supplemental?

Mr. FORBES. Yes, sir.

Mr. FENTON. All right, justify that.

Mr. FORBES. I think I will pass that over to Mr. Westfield. He can furnish us the information on that.

Mr. WESTFIELD. On the personnel needed for inspections, we have to base it primarily on the number of mine inspectors that we have in in the field—the number of inspectors working.

Last year we made a total of 8,693 inspections, and from January 1 until July 31, 1952, we made a total of 3,137 inspections. The average rate of inspections per month in 1952 was 724, and during the last 6 months of calendar year 1952 the average was 522, which shows a decrease because of the additional load, requiring additional trips back to the mines because of reinspection work.

The average inspections per month per inspector employed were 3.2 in 1952 and 2.3 the last 6 months of calendar year 1952. The average number of inspections per inspector during 1952 was 38.3.

The average inspections per month per inspector on inspection work only was 3.6, and the additional 75 inspectors we are asking for would be working at this rate, because the other jobs, such as reviewing of reports, checking inspections made by our supervisory inspectors, and other work for which enough persons are available to handle the additional load of 75 inspectors. So, all the new inspectors employed would be put on actual inspection work.

Using this as a basis, with the 75 inspectors, we find that the additional inspections per month would be increased about 52 percent, or a total of about 270 inspections per month. With a 52 percent increase in load resulting from the employment of 75 additional inspectors, we would require additional personnel to the extent of 42 persons. We ask for a total of 40 persons, clerical help, primarily based on actual experience of previous years. The clerical help averages about 1 clerk for every 2½ to 3 inspectors.

In the laboratories during 1952 there were more than 14,000 air samples analyzed at our gas-analysis laboratory at Pittsburgh and the total number of persons analyzing samples was 12. The average number of samples analyzed per month was 1,173. The average number analyzed per month per analyst was 98.

Of the dust samples that are taken by our inspectors and sent to Pittsburgh for analysis, there was a total of 8,482 in 1952. The total number of persons analyzing mine-dust samples was 12—the same number of persons as we have in the gas-analysis laboratory. The average number of dust samples analyzed per month was 708 and the average number of samples analyzed per person was 59. Calculations justifying 13 more laboratory personnel needed to analyze the additional air and dust samples collected by 75 additional inspectors were made. The 75 additional inspectors will be on inspection work exclusively. They will make 270 additional inspections per month which is an increase of 52 percent; they will collect 52 percent more air and dust samples than have been collected heretofore.

Mr. FENTON. In regard to the additional personnel which you need, or claim you need, will you itemize that and put it in the record at this point, with a brief résumé of just why you need them?

Mr. WESTFIELD. Yes, sir.

Mr. FENTON. There is no additional personnel requested, other than what you requested in the supplemental?

Mr. FORBES. For coal-mine inspection and supporting personnel it is the same, but we are requesting supporting research activities estimated to cost $65,000. I just want to make this observation before you close the discussion on health and safety, that we do need some supporting personnel. We absolutely need them and if we did not need them, we would not ask for them.

(The matter referred to follows:)

Budget estimates, fiscal year 1954, additional to present appropriations to administer title II, Federal Coal Mine Safety Act, Public Law 552, 82d Cong.

COAL-MINE INSPECTION AND AUXILIARY ACTIVITIES

Personal services:	
75 coal-mine inspectors, GS–12, at $7,040 per annum	$528,000
12 mining engineers, GS–13, at $8,360 per annum	100,320
1 electrical engineer, GS–12, at $7,040 per annum	7,040
10 electrical inspectors, GS–11 at $5,940 per annum	59,400
1 attorney, GS–15 at $10,800 per annum	10,800
2 attorneys, GS–12, at $7,040 per annum	14,080
1 chemist, GS–9, at $5,060 per annum	5,060
1 chemist, GS–7, at $4,205 per annum	4,205
2 glassblowers, GS–6, at $3,795 per annum	7,590
2 laboratory technicians, GS–6, at $3,795 per annum	7,590
4 laboratory technicians, GS–5, at $3,410 per annum	13,640
1 laboratory technician, GS–4, at $3,175 per annum	3,175
2 laboratory technicians, GS–3, at $2,950 per annum	5,900
5 clerks, GS–5, at $3,410 per annum	17,050
10 clerks, GS–4, at $3,175 per annum	31,750
15 clerk-typists, GS–3, at $2,950 per annum	44,250
10 clerk-typists, GS–2, at $2,750 per annum	27,500
01 Personal services	887,350
Other obligations:	
02 Travel	150,000
03 Transportation of things	20,000
04 Communication services	30,000
05 Rents and utilities	75,000
06 Printing and reproduction	33,000
07 Other contractual services	50,000
08 Supplies and materials	79,000
09 Equipment	14,210
Total, other obligations	451,210
Total	1,338,560

SUPPORTING RESEARCH ACTIVITIES

Personal services:	
1 physicist, GS–12	7,040
1 mining engineer, GS–11	5,940
1 physicist, GS–11	5,940
1 engineer, GS–7	4,205
1 chemist, GS–7	4,205
1 scientific aide, GS–5	3,410
1 mechanic, CPC–6	3,200
2 coal-mine workmen, CPC–5, at $2,974 per annum	5,948
1 clerk-stenographer, GS–4	3,175
2 clerk-typists, GS–3, at $2,950 per annum	5,900
01 Personal services	48,963
Other obligations:	
02 Travel	1,500
03 Transportation of things	700
04 Communication services	500
05 Rents and utilities	1,000
06 Printing and reproduction	700
07 Other contractual services	4,500
08 Supplies and materials	5,000
09 Equipment	2,137
Total, other obligations	16,037
Total	65,000

Budget estimates, fiscal year 1954, additional to present appropriations to administer title II, Federal Coal Mine Safety Act, Public Law 552, 82d Cong.—Continued

RECAPITULATION OF OBLIGATIONS

01	Personal services	$936,313
02	Travel	151,500
03	Transportation of things	20,700
04	Communication services	30,500
05	Rents and utilities	76,000
06	Printing and reproduction	33,700
07	Other contractual services	54,500
08	Supplies and materials	84,000
09	Equipment	16,347
	Total	1,403,560

SUPPORTING PERSONNEL NEEDED FOR THE AUGMENTED FORCE OF INSPECTORS AND ENGINEERS

On the basis of inspectors on inspection work only, each inspector made 3.6 inspections per month during the last 6 months of 1952. Since the additional 75 new inspectors' time will be spent on inspection work only, it is estimated that 270 additional inspections will be made each month, or an increase of 52 percent over the performance during the last half of 1952.

A similar increase is expected in the number of air and dust samples to be analyzed; therefore, the present laboratory personnel of 26 (24 analysts and 2 glassblowers) will have to be increased by 52 percent, or 13 additional employees, to cope with the additional workload.

A legal staff of three attorneys will be required. One attorney will be headquartered in Washington; and two will be employed in the field on legal aspects of the enforcement provisions of the law. They will also be required to represent the Director in connection with appeals to the Federal Coal Mine Safety Board of Review and to assist the Department of Justice in such cases as are appealed to the Federal courts.

In order to cope with this additional workload, the present clerical force of 80 will have to be increased by 40 clerks, to type and process the increased inspection reports that will be forthcoming, and to provide clerical help for the additional mining engineers, electrical inspectors, attorneys, and results of laboratory analyses.

EXPLOSIVES AND EXPLOSIONS TESTING AND RESEARCH

Mr. FENTON. On page 71 of the justifications you say that representatives of the coal industry have urged the Bureau to cooperate in explosives research. Does the industry contribute anything toward this work that they request you to do?

Mr. FORBES. On this particular work, I cannot think where the industry has helped out at all.

Mr. FENTON. According to the justifications, they have requested you to assist in this work.

Mr. FORBES. Perhaps I misunderstood your question, Dr. Fenton.

Mr. FENTON. It says representatives of the coal industry have urged the Bureau of Mines to cooperate with industry in solving the problem of gas explosions in underground coal mining, particularly in mines where large volumes of gas are liberated underground. The Bureau is willing and anxious to cooperate in this work and is particularly fitted to do so because of the experience and knowledge of its engineers and technologists in underground coal mining, drilling procedures, and with problems of migration of gases through various types of geological formations.

Mr. WESTFIELD. That is Dr. McCabe's problem, but I think I can give you an answer. At the present time they are doing some experimental work, particularly in West Virginia and Pennsylvania, to see if the gas that is produced by the coal can be tapped and used commercially, and also the idea is to make the mines much safer and to relieve the gas before mining in the extremely gassy areas so that the gas will not enter the mine workings.

Mr. FORBES. I have an idea, since there has been a movement in the direction of cooperation on the part of industry to go along, that they contribute so much and the Bureau of Mines contributes so much to attack this problem. It is a very important problem.

Mr. FENTON. If there have been any contributions from industry along that line, will you put it in the record at this point?

(The matter referred to follows:)

DEGASIFICATION OF COAL-BEARING STRATA

Coal-mining companies have worked closely with members of the Bureau's staff in degasification of coal-bearing strata, and have borne the cost of drilling, sinking shafts, and doing other needed work on their properties.

The Rochester & Pittsburgh Coal Co. and the Bureau's engineers collaborated in a degasification project at a mine in central Pennsylvania. Gas emissions at this mine resulted in prohibitive amounts of methane in the mine ventilating circuits. A new air shaft was sunk in the area to provide additional ventilation, and five holes were drilled in an attempt to draw off the gas before mining was continued in the area. The increased ventilation provided by the air shaft together with drainage from drill holes have resulted in reduction of gas in the airways to safe limits. The Bureau contributed technical advice and time of its engineers and the company paid all drilling and shaft-sinking costs.

The Christopher Coal Co. is conducting an experiment in degasification by vertical drill holes in an area of Pittsburgh coal in northern West Virginia where dangerous emissions of methane have been encountered. The experiment is under the direction of the mining department of the University of West Virginia. The cost of the work is being borne by the mine operator. The Bureau is keeping in close touch with the progress of the work through the full cooperation of representatives of both the company and the university in furnishing complete data relative to the experiment as it progresses.

The emission of methane in dangerous quantities has been experienced in most of the coalfields in the United States and it may be expected that, in the future, trouble from gas emissions will increase as coal beds near the surface are depleted and deeper mining is undertaken. Bureau representatives and industry officials believe that methods of degasification adaptable to conditions in the United States can be developed, and the Bureau can depend upon cooperation from the industry in studies of methods of solving the problems. Apparently, the experimentation required will be costly and some coal-mine operators have recommended that experiments should be carried out jointly by mining companies, the Bureau of Mines, and State governments, rather than by individual mine operators.

MINE ACCIDENTS AND INJURIES

Mr. FENTON. Also put into the record at this point the mine accident and injury figures you put in every year.

Mr. FORBES. We will be happy to do that.

(The matter referred to follows:)

Injuries per million man-hours exposure, portal-to-portal

Year	Fatal			Nonfatal		
	Bituminous	Anthracite	Total	Bituminous	Anthracite	Total
1933	1.31	1.49	1.34	68.87	98.13	74.58
1934	1.41	1.50	1.43	69.39	104.15	76.64
1935	1.46	1.78	1.52	71.47	103.16	77.43
1936	1.43	1.56	1.45	65.62	108.80	72.92
1937	1.54	1.58	1.55	68.05	98.72	72.62
1938	1.52	1.94	1.59	63.47	110.85	71.36
1939	1.36	1.71	1.42	60.53	107.37	68.12
1940	1.68	1.50	1.65	61.28	112.56	68.75
1941	1.35	1.49	1.37	58.93	110.83	66.26
1942	1.41	1.64	1.44	60.21	98.73	65.40
1943	1.39	1.50	1.40	57.79	89.68	62.44
1944	1.23	1.06	1.20	56.02	76.05	59.06
1945	1.13	1.01	1.11	56.52	77.32	59.58
1946	1.09	1.14	1.10	58.81	82.65	62.92
1947	1.23	1.18	1.22	57.32	79.41	60.72
1948	1.15	.91	1.11	56.28	75.69	59.53
1949	.93	.83	.91	51.67	71.88	55.11
1950	.92	.80	.90	47.73	76.14	52.38
1951 [1]	1.08	.94	1.06	48.04	66.55	50.70
1952 [1]	.82	.94	.84	55.77	59.83	56.42

[1] Data for 1951 and 1952 are subject to revision.

Number of fatal and nonfatal injuries

Year	Fatal			Nonfatal		
	Bituminous	Anthracite	Total	Bituminous	Anthracite	Total
1933	833	231	1,064	43,946	15,183	59,129
1934	958	268	1,226	46,982	18,577	65,559
1935	968	274	1,242	47,529	15,897	63,426
1936	1,098	244	1,342	50,514	17,026	67,540
1937	1,198	215	1,413	52,847	13,412	66,259
1938	880	225	1,105	36,794	12,842	49,636
1939	867	211	1,078	38,544	13,229	51,773
1940	1,204	184	1,388	43,994	13,782	57,776
1941	1,072	194	1,266	46,637	14,420	61,057
1942	1,245	226	1,471	53,193	13,581	66,774
1943	1,225	226	1,451	51,067	13,527	64,594
1944	1,124	174	1,298	51,253	12,438	63,691
1945	925	143	1,068	46,194	10,923	57,117
1946	795	173	968	42,817	12,533	55,350
1947	985	173	1,158	46,025	11,635	57,660
1948	862	137	999	42,078	11,394	53,472
1949	494	91	585	27,548	7,857	35,405
1950	550	93	643	28,390	8,874	37,264
1951 [1]	685	100	785	30,525	7,115	37,640
1952 [1]	447	99	546	30,500	6,300	36,800

[1] Figures are subject to revision.

Number of injuries and injury frequency rates [1] per million man-hours at bituminous-coal mines in the United States, 1949–52

	1949				1950				1951 [2]				1952 [2]			
	Number of injuries		Frequency		Number of injuries		Frequency		Number of injuries		Frequency		Number of injuries		Frequency	
	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal [3]	Fatal	Non-fatal [3]	Fatal	Non-fatal [3]	Fatal	Non-fatal [3]
Underground:																
Falls of roof or face	270	5,086	0.51	9.54	314	5,356	0.53	9.00	312	.....	0.49	.....	239	.....	0.44	.....
Haulage	99	5,619	.19	10.54	105	5,784	.18	9.72	103	.....	.16	.....	100	.....	.18	.....
Gas or dust explosions:																
Local	3	12	.01	.02	3	20	.01	.03	1	.....	(4)	.....	5	.....	.01	.....
Major									152	.....	.24	.....	6	.....	.01	.....
Explosives	14	211	.03	.40	10	264	.02	.44	7	.....	.01	.....	5	.....	.01	.....
Electricity	10	731	.02	1.37	11	696	.02	1.17	19	.....	.03	.....	10	.....	.02	.....
Machinery	21	3,230	.04	6.06	19	3,343	.03	5.62	19	.....	.03	.....	15	.....	.03	.....
Mine fires		23		.04		39		.07		.....		.....	4	.....	.01	.....
All other	8	8,293	.02	15.55	7	8,309	.01	13.97	8	.....	.01	.....	4	.....	.01	.....
Total underground	425	23,205	.80	43.52	469	23,811	.79	40.03	621	.....	.98	.....	388	.....	.71	.....
Surface [5]	47	2,688	.09	5.04	46	2,800	.08	4.71	35	.....	.06	.....	35	.....	.06	.....
Strip mines	22	1,655	.04	3.10	35	1,779	.06	2.99	29	.....	.05	.....	24	.....	.04	.....
Grand total	494	27,548	.93	51.67	550	28,390	.92	47.73	685	30,525	1.08	48.04	447	30,500	.82	55.77

[1] All rates are calculated separately, and total rates may differ slightly from the sums of the component rates.
[2] All figures are preliminary.
[3] Breakdown of nonfatal injuries by causes not yet available.
[4] Less than 0.005 per million man-hours.
[5] Includes 1 fatality in 1951 and 1 in 1952 caused by an explosion of dust on the surface.

Number of injuries and injury frequency rates [1] per million man-hours at all coal mines in the United States, 1949–52

	1949				1950				1951 [2]				1952 [2]			
	Number of injuries		Frequency		Number of injuries		Frequency		Number of injuries		Frequency		Number of injuries		Frequency	
	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal [3]	Fatal	Non-fatal [3]	Fatal	Non-fatal [3]	Fatal	Non-fatal [3]
Underground:																
Falls of roof or face	324	6,607	0.50	10.28	373	6,932	0.52	9.74	363	.....	0.49	.....	284	.....	0.44	.....
Haulage	113	6,443	.18	10.03	110	6,649	.15	9.35	117	.....	.16	.....	117	.....	.18	.....
Gas or dust explosions:																
Local	8	29	.01	.05	8	34	.01	.05	5	.....	.01	.....	9	.....	.01	.....
Major									157	.....	.21	.....	6	.....	.01	.....
Explosives	17	250	.03	.39	15	336	.02	.47	12	.....	.02	.....	9	.....	.01	.....
Electricity	10	773	.02	1.20	12	753	.02	1.06	20	.....	.03	.....	10	.....	.02	.....
Machinery	21	3,616	.03	5.63	19	3,782	.03	5.32	19	.....	.03	.....	17	.....	.03	.....
Mine fires	4	25	.01	.04		43		.06					4	.....	.01	.....
All other	11	12,140	.02	18.90	10	12,750	.01	17.92	17	.....	.02	.....	17	.....	.03	.....
Total underground	508	29,883	.79	46.51	547	31,279	.77	43.97	710	.....	.96	.....	473	.....	.73	.....
Surface [4]	52	3,574	.08	5.56	57	3,739	.08	5.26	43	.....	.06	.....	43	.....	.07	.....
Strip mines	25	1,948	.04	3.03	39	2,246	.05	3.16	32	.....	.01	.....	30	.....	.05	.....
Grand total	585	35,405	.91	55.11	643	37,264	.90	52.38	785	37,640	1.06	50.70	546	36,800	.84	56.42

[1] All rates are calculated separately, and total rates may differ slightly from the sums of the component rates.
[2] All figures are preliminary.
[3] Breakdown on nonfatal injuries by causes not available.
[4] Includes 1 fatality in 1951 and 1 in 1952 caused by an explosion of dust on the surface.

TABLE 8.—*Number of injuries and injury frequency rates [1] per million man-hours at Pennsylvania anthracite mines, 1949–52*

	1949				1950				1951 [2]				1952 [2]			
	Number of injuries		Frequency		Number of injuries		Frequency		Number of injuries		Frequency		Number of injuries		Frequency	
	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal [3]	Fatal	Non-fatal [3]	Fatal	Non-fatal [3]	Fatal	Non-fatal [3]
Underground:																
Falls of roof or face	54	1,521	0.49	13.91	59	1,576	0.51	13.52	51	.....	0.48	.....	45	.....	0.43	.....
Haulage	14	824	.13	7.54	5	865	.04	7.42	14	.....	.13	.....	17	.....	.16	.....
Gas or dust explosions:																
Local	5	17	.05	.16	5	14	.04	.12	4	.....	.04	.....	4	.....	.04	.....
Major									5	.....	.05	.....				
Explosives	3	39	.03	.36	5	72	.04	.62	5	.....	.05	.....	4	.....	.04	.....
Electricity		42		.38	1	57	.01	.49	1	.....	.01	.....				
Machinery		386		3.53		439		3.77					2	.....	.02	.....
Mine fires	4	2	.04	.02		4		.03								
All other	3	3,847	.03	35.19	3	4,441	.03	38.10	9	.....	.08	.....	13	.....	.12	.....
Total underground	83	6,678	.76	61.09	78	7,468	.67	64.07	89	.....	.83	.....	85	.....	.81	.....
Surface	5	886	.05	8.11	11	939	.09	8.06	8	.....	.07	.....	8	.....	.08	.....
Strip mines	3	293	.03	2.68	4	467	.03	4.01	3	.....	.03	.....	6	.....	.06	.....
Grand total	91	7,857	.83	71.88	93	8,874	.80	76.14	100	7,115	.94	66.55	99	6,300	.94	59.83

[1] All rates are calculated separately, and total rates may differ slightly from the sums of the component rates.
[2] Figures are preliminary.
[3] Breakdown of nonfatal injuries by causes not yet available.

MINE ROOF RESEARCH

Mr. FENTON. How about making roofs safer?

Mr. FORBES. I think that is coming along in good shape. I haven't seen the figures recently as to the number of mines, but as I recall it runs well over 600 mines that are being protected by roof bolts, and I am happy to say that the resistance in the Pennsylvania anthracite region is beginning to break down quite a bit, and also, the resistance in western Pennsylvania is starting to break down.

CONSTRUCTION

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$1,587,412	$1,000,000	$1,760,000
Prior year balance available:			
Appropriation	1,393,464	1,377,144	257,246
Contract authorization	6,600,000		
Total available for obligation	9,580,876	2,377,144	2,017,246
Balance available in subsequent year (appropriation)	−1,377,144	−257,246	−257,246
Rescission of contract authorization, Public Law 136	−4,000,000		
Obligations incurred	4,203,732	2,119,898	1,760,000

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
1. New laboratory facilities	$424,931	$1,153,890	$1,560,000
2. Synthetic liquid fuels	3,438,247	881,774	200,000
3. Drainage tunnel, Leadville, Colo	340,554	84,234	
Obligations incurred	4,203,732	2,119,898	1,760,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	72	6	6
Full-time equivalent of all other positions	4	1	
Average number of all employees	67	7	5
Average salaries and grades:			
General schedule grades:			
Average salary	$6,067	$6,172	$5,970
Average grade	GS–8.9	GS–8.4	GS–8.2
Ungraded positions: Average salary	$4,278	$2,808	
01 Personal services:			
Permanent positions	$279,032	$33,086	$33,202
Part-time and temporary positions	15,627	4,000	
Regular pay in excess of 52-week base	847	115	122
Payment above basic rates	6,063	1,685	
Total personal services	301,569	38,886	33,324
02 Travel	6,526	1,175	1,000
03 Transportation of things	8,463	6,869	2,000
04 Communication services	1,560	500	200
05 Rents and utility services	51,062	2,500	100
06 Printing and reproduction	92		
07 Other contractual services	280,519	348,095	8,800
08 Supplies and materials	98,643	4,979	1,000
09 Equipment	353,028	17,978	300,000
10 Lands and structures	3,100,015	1,697,671	1,413,576
15 Taxes and assessments	2,255	1,245	
Obligations incurred	4,203,732	2,119,898	1,760,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$1,174,597	$3,405,037	$819,935
Obligations incurred during the year	4,203,732	2,119,898	1,760,000
	5,378,329	5,524,935	2,579,935
Deduct:			
Unliquidated obligations, end of year	3,405,037	819,935	1,179,935
Obligations transferred to "Construction (liquidation of contract authorization), Bureau of Mines"		2,600,000	
Total expenditures	1,973,292	2,105,000	1,400,000
Expenditures are distributed as follows:			
Out of current authorizations	1,973,292	980,000	660,000
Out of prior authorizations		1,125,000	740,000

Construction (liquidation of contract authorization), Bureau of Mines

Appropriated 1953 ..... $2,600,000

Amounts available for liquidation of contract authorization

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate		$2,600,000	
Applied to contract authorization		−2,600,000	
Obligations incurred			

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations start of year			$1,200,000
Obligations transferred from "Construction, Bureau of Mines"		$2,600,000	
Deduct unliquidated obligations, end of year		1,200,000	
Total expenditures		1,400,000	1,200,000
Expenditures are distributed as follows:			
Out of appropriations to liquidate prior year contract authorization		1,400,000	
Out of prior authorization			1,200,000

Mr. FENTON. Before we begin discussion of the construction item we will insert into the record the tables on pages 75 and 76 of the justifications.

(The matter referred to follows:)

Analysis by activities

Activities	Appropriation, 1953	Decreases	Base, 1954	Estimate, 1954	Increases
1. New laboratory facilities	$750,000	$750,000		$1,560,000	$1,560,000
2. Synthetic liquid fuels	250,000	50,000	$200,000	200,000	
Total	1,000,000	800,000	200,000	1,760,000	1,560,000

1. New laboratory facilities

Subactivity	1953 appropriation	Decreases	1954 base	1954 estimate	Increases
(1) Construction and equipment of an experiment station at Reno, Nev	$750,000	$750,000			
(2) Construction and equipment of an experiment station at Minneapolis, Minn				$1,335,000	$1,335,000
(3) Construction of additional laboratory facilities at Pittsburgh, Pa				225,000	225,000
Total	750,000	750,000		1,560,000	1,560,000

Mr. FENTON. We are concerned only with $225,000 requested for the laboratories at Pittsburgh and $200,000 for the synthetic liquid fuels program. What do you wish to say about that?

Mr. FORBES. The $225,000 for the construction of additional laboratory facilities in Pittsburgh will be an additional story over one of the buildings we have there to take care of the additional workload in connection with our safety and health laboratories. We are just about crowded out of the main building now, and we are certainly going to need a place to expand. I think that is a very moderate amount of money, inasmuch as we have the building and we can put this story on there for $225,000. It is worthwhile. That has been approved by the Secretary.

Mr. FENTON. Wasn't that already completed?

Mr. FORBES. I think they have been doing some work in connection with it.

Mr. RICE. The roof is on that but none of the interior work has been done; no plumbing, no walls, no interior finish, or anything, only a skeleton roof on it.

Mr. FENTON. It requires $225,000 to complete it?

Mr. RICE. The inside of it. That is the big part of the job.

Mr. FENTON. Where did that money come from?

Mr. RICE. That came out of the synthetic-liquid-fuels money, because a part of the space that is taken up there is for synthetic-liquid fuels, so that is their share of the job.

Mr. FENTON. How much of the $200,000 for the liquid-fuel program can be eliminated, if none is allowed for the ammonia-synthesis program for the Agriculture Department?

Mr. RICE. That would be $7,100, the research on gas production. Also item 3 totals $97,000 for the work at Louisiana, Mo., if that is to be recessed in accordance with the discussion this morning.

Mr. FORBES. Do you think that could be eliminated although it had been approved by the Secretary?

Mr. FENTON. This can be eliminated.

Mr. FORBES. I would like to go into it a little further and probably insert a statement into the record if you will permit us. I am not too familiar with the details.

Mr. FENTON. You let us know.

Mr. FORBES. There may be something pretty vital.

Mr. FENTON. Let us know what you can do on that.

(The matter referred to is as follows:)

The $7,100 in item 3 (a) on page 79 of the justification will not be needed if the work on ammonia synthesis is not done. The $48,500 in item 3 (a) will not be needed if the coal-hydrogenation plant at Louisiana, Mo., is to be recessed June 30, 1953. The $48,500 in item 3 (b) may be reduced $20,000, leaving $28,500 for minor changes in the gas-synthesis plant at Louisiana, Mo., if it is to operate only during the first part of the fiscal year 1954.

General Administrative Expenses

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$1,260,841	$1,278,000	$1,325,000
Reimbursements from other accounts	387		
Total available for obligation	1,261,228	1,278,000	1,325,000
Unobligated balance, estimated savings	−3,627		
Obligations incurred	1,257,601	1,278,000	1,325,000

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
General administrative expenses	$1,257,214	$1,278,000	$1,325,000
Obligations Payable Out of Reimbursements From Other Accounts			
General administrative expenses	387		
Obligations incurred	1,257,601	1,278,000	1,325,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	240	254	264
Full-time equivalent of all other positions	2	1	1
Average number of all employees	224	235	245
Average salaries and grades:			
General schedule grades:			
Average salary	$4,822	$4,840	$4,840
Average grade	GS–6.8	GS–6.8	GS–6.7
Crafts, protective, and custodial grades:			
Average salary	$2,872	$2,748	$2,748
Average grade	CPC–3.0	CPC–2.8	CPC–2.8
Direct Obligations			
01 Personal services:			
Permanent positions	$1,065,871	$1,122,852	$1,170,650
Part-time and temporary positions	5,188	3,000	3,000
Regular pay in excess of 52-week base	4,068	4,346	4,491
Payment above basic rates	10,179	10,045	11,159
Total personal services	1,085,306	1,140,243	1,189,300
02 Travel	40,897	42,650	43,000
03 Transportation of things	3,955	1,705	1,700
04 Communication services	12,656	8,245	8,200
05 Rents and utility services	153	95	95
06 Printing and reproduction	20,852	29,905	29,000
07 Other contractual services	5,261	7,700	7,000
08 Supplies and materials	27,652	24,500	23,700
09 Equipment	58,704	22,012	22,000
13 Grants, awards, and indemnities	838	10	10
15 Taxes and assessments	940	935	935
Total direct obligations	1,257,214	1,278,000	1,325,000
Obligations Payable Out of Reimbursements From Other Accounts			
02 Travel	387		
Obligations incurred	1,257,601	1,278,000	1,325,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$164,631	$145,042	$143,042
Obligations incurred during the year	1,257,601	1,278,000	1,325,000
	1,422,232	1,423,042	1,468,042
Deduct:			
Reimbursable obligations	387		
Adjustment in obligations of prior years	6,730		
Unliquidated obligations, end of year	145,042	143,042	149,042
Total expenditures	1,270,073	1,280,000	1,319,000
Expenditures are distributed as follows:			
Out of current authorizations	1,126,915	1,150,000	1,190,000
Out of prior authorizations	143,158	130,000	129,000

Mr. FENTON. We will now take up "General administrative expenses" and insert into the record page 84 of the justifications.

(The matter referred to is as follows:)

General administrative expenses

Appropriation act, 1953		$1,278,000
Increases:		
New positions	$45,747	
Other expenses	1,253	
Total increase for 1954		47,000
Budget estimate 1954		1,325,000

INCREASES

Mr. FENTON. Your increases for this general administrative expense are: new positions $45,747, and other expenses $1,253, for a total of $47,000.

How much can this item be reduced, if the other reductions are approved?

Mr. RICE. I don't think this can be reduced. As pointed out this morning, this appropriation is the backbone of the administration of the Bureau of Mines. It is used for the essential administrative functions in the Office of the Director here in Washington and in the offices of the regional directors in the field. The estimates for those regional offices, which were first presented the first year we had this item in the budget, were based on conjecture as to what would be the cost in those offices. We find now with 2 years' experience, we need some small increases totaling $34,000, distributed among the several regions. This is not an item that would change greatly within reasonable limits of expansion or contraction of the activities of the Bureau.

Mr. FORBES. I think on page 86 it gives the distribution by regions.

Mr. RICE. Just for the increases.

Mr. FENTON. You don't think it can be reduced?

Mr. RICE. That is correct.

FOREIGN WORK

Mr. FENTON. How do you handle foreign work? Have you in the past had a regional director for this function?

Mr. RICE. Yes, we have had a regional director for this function, and his salary was drawn by small contributions from the appropriations for the several commodities that are included in the activities of the foreign region. They deal with imports and the ability to produce abroad and supply to us the things that we need from abroad.

Mr. FENTON. Who is that?

Mr. RICE. Elmer Pehrson.

Mr. FORBES. The point 4 program comes under the direction of Elmer Pehrson; all that money comes from ECA. The Bureau furnishes very little of the money. Don't they get some money from——

Mr. RICE. From MSA, CIA, and other agencies.

Mr. FENTON. Can't they absorb the salary?

Mr. FORBES. No, I think we have to pay the salaries.

Mr. RICE. We have got to have some kind of a basic organization to start with.

Mr. FENTON. It is just a matter of trying to get money from somebody else.

Mr. RICE. You have got to have a starting organization.

REGIONAL OFFICES

Mr. FENTON. The question was asked about the regional setup, whether or not it was necessary for that kind of thing. I believe the answer is in the affirmative. I am looking at region VIII in front of me there, and I am looking at a region known as the anthracite region, which is as different a function as day is from night, in my estimation, from the bituminous areas. I certainly am not satisfied with that regional setup so far as the anthracite areas are concerned. I think this is about the second or third year I have harped on that particular subject. I can't see why we have to donate a certain amount of money allocated for the anthracite region to those fellows in Pittsburgh. I say this advisedly. I don't think they have the anthracite region at heart. I am sorry we can't have that changed to run it from the office in Washington where it should be and where a man, such as the director himself, has enough interest to see that the anthracite area gets its fair share of research work. We have asked repeatedly about this thing. I don't know whether you have given it any serious thought or not, since the last time I spoke about it.

Mr. FORBES. We have given it serious thought, and we had a table prepared, a breakdown as to the cost, but your idea is it should be broken up into a separate region.

Mr. FENTON. It certainly is. Isn't it true that there is a great difference.

Mr. FORBES. There are differences.

Mr. FENTON. Between anthracite and bituminous.

Mr. FORBES. Comparing the mining methods in the bituminous fields of Pennsylvania with those in the anthracite region, the anthracite methods are different from the bituminous, particularly with respect to the pitching anthracite beds.

Mr. FENTON. We need somebody that has the interest of that greatly distressed economical area to do something about it. I think our research work should go forward there on an independent basis, if you please, to try and help alleviate those conditions. I feel very keenly about it.

Mr. FORBES. I know that you have expressed yourself several times about it.

Mr. FENTON. I don't know what figures you came up with. As I recall, it was just a few thousand dollars. I think the benefits derived from such an arrangement would far surpass anything you could think of.

Mr. FORBES. Let us take it under serious consideration.

Mr. FENTON. I don't mind saying that I have already approached others on this problem. Take the mine fire problem, for instance. What do those fellows know about the anthracite region mine fires? I think I know something about mining, and I know something about the characteristics of the anthracite area. Everything is out there in Pittsburgh. I am beginning to believe that each region that you have is becoming a little Bureau of Mines in itself. Certainly Pittsburgh, I think, has just about outgrown itself as far as I am concerned.

Mr. FORBES. That is what we are hoping to break down. We don't want eight little Bureaus of Mines. Otherwise this whole thing will be destroyed. We have regional meetings twice a year. These men get together, and they discuss problems common to each other. I can see some very definite advantages. Of course, you have a problem in connection with the anthracite. It will mean a change in the basic organizational structure that has been set up by the Secretary's office.

Mr. FENTON. I can't see that there is going to be that great a difference in the setup. We only occupy about seven counties in eastern Pennsylvania. The mining there is so different from the other types of mining.

Mr. FORBES. Let us go into it carefully.

Mr. FENTON. I wish you would. I wish you would take a look at every region and see what can be done, because you are going to be asked to do it sooner or later.

Mr. FORBES. The idea is to get away from centralized government, to put the work out into the field, decentralize it. That was the whole idea back of the regionalization; put it into the field.

Mr. FENTON. You are certainly concentrated in Pittsburgh. We are very much closer to Washington.

Mr. FORBES. We will probably go into an examination of regionalization versus centralization. Of course, I feel certain that we couldn't handle all this work from Washington. It would be a tremendous task, supervision and everything else. There are a lot of advantages.

Mr. FENTON. How many employees have you got in the anthracite area?

Mr. FORBES. Anthracite is fairly close to Washington.

Mr. FENTON. Off the record.

(Discussion off the record.)

OFFICE SPACE IN ANTHRACITE AREA

Mr. FENTON. How much do we pay for office space in Wilkes-Barre and those other places?

Mr. FORBES. Not anything for safety employees. We do on flood control.

Mr. WESTFIELD. I don't know what the cost of that is. I couldn't give you a figure on that.

Mr. FENTON. How many inspectors are based at Wilkes-Barre?

Mr. WESTFIELD. I think 26 altogether in the anthracite field. Seven of these are now in Schuylkill Haven.

Mr. FENTON. Aren't there any rentals?

Mr. FORBES. We are in the post office building in Wilkes-Barre, no rentals. The only rentals would be a few people who do flood-control work, and as I recall, that may be eliminated soon.

Mr. FENTON. What about garage rent?

Mr. FORBES. We have garage rent and it is quite an item in Wilkes-Barre.

Mr. FENTON. How much is it?

Mr. WESTFIELD. Around $15 a car per month.

Mr. FENTON. How many cars are there?

Mr. WESTFIELD. Twenty-five cars altogether assigned to inspectors including the people we transferred to Schuylkill Haven. There is a car for each inspector headquartered at Schuylkill Haven.

Mr. FORBES. About $5,000 a year for a garage; it is quite an item.

Mr. WESTFIELD. We are having the same trouble at Schuylkill Haven. They don't have sufficient garage space.

Mr. FENTON. Is there room near the building?

Mr. WESTFIELD. At the present time we are having trouble securing garage space at Schuylkill Haven.

AUTOMOBILES REQUESTED

Mr. FENTON. Are you asking for some automobiles?

Mr. FORBES. Yes, we are.

Mr. FENTON. Is that in addition to the supplemental?

Mr. FORBES. The automobiles listed on page 90 were not requested in the supplemental. These 14 new cars are not for the inspectors. Authorization is requested for a total of 98 cars but 84 of these are for replacement. Fourteen new automobiles, I was going to say. I have been very much exercised over this statement with respect to automobiles at one of our facilities in the field.

Mr. FENTON. Pages 90 and 91 will be inserted in the record at this point.

(The matter referred to follows:)

Purchase of automobiles.—Authorization is requested for the purchase of 98 automobiles of which 84 are for replacement only. The 14 new automobiles requested are distributed by activity as follows:

Coal:	
Coal mining methods	1
Anthracite Research Laboratory	1
Petroleum and natural gas:	
Secondary recovery	1
Primary production	1
Synthetic liquid fuels:	
Hydrogenation	1
Gas synthesis	1
Oil shale mining	1
Ferrous metals and alloys:	
Iron	1
Manganese	1
Ferroalloy metals, general	1
Nonferrous metals:	
Rare and precious metals	1
Recovery of secondary metals	1
Mineral research, unclassified: Rogue River Basin surveys	1
Explosives and explosions testing and research	1
Total	14

The 84 automobiles requested for replacement represents approximately 13 percent of the Bureau's fleet of automobiles. All of the cars recommended for replacement meet the Bureau of the Budget standards for replacement on the basis of age or mileage.

Transportation of students.—The operation of the Bureau's helium plants and some of the synthetic liquid fuels installations are far enough removed from areas where adequate school facilities are available for children of employees that it is necessary to furnish transportation for such students.

Exception from civil-service requirements.—In order to obtain personnel with the training and experience required for two of the Bureau's special activities, i. e., control of mine fires and prevention of flooding in anthracite mines the exception from civil-service requirements is necessary.

Contributions.—Many phases of the Bureau's activities are of interest to various industrial organizations that are at times willing to contribute funds, experienced personnel, special equipment, etc., toward accomplishing certain objectives which may be useful to industrial purposes. The Bureau is endeavoring to cooperate with industry wherever possible and authorization to accept such contributions is a distinct aid in furthering such cooperation.

Sale of excess power, Louisiana, Mo.—The power generating facilities of the synthetic liquid fuels plant at Louisiana, Mo., have greater capacity than is required for operation of the plant itself at the present time. As there is a shortage of power in that area the Bureau has been authorized to sell such excess power, the receipts from which are covered into miscellaneous receipts of the Treasury.

Transfer of funds for sale of helium to Government agencies.—The Departments of Air Force, Army, and Navy purchase quantities of helium from the Bureau. Language is necessary to authorize the transfer of funds to be used for that purpose at the beginning of the fiscal year as such funds are used for operation of the helium plants.

Sale of metals and mineral products.—In some of the metallurgical pilot plants of the Bureau, quantities of special metals may be manufactured which might be of value to industrial concerns. Funds received from such sales would be covered into miscellaneous receipts. However, no such sales are being made at the present time.

Mr. FORBES. It is my intention to make a complete survey of all automobiles and trucks so we can give you the facts with respect to the need for automobiles.

Mr. FENTON. I wish you could get that information for us before we mark up the bill.

Mr. FORBES. It will be quite a job to do it. I want to send somebody from Washington to do it.

Mr. FENTON. I think that is all, gentlemen.

WEDNESDAY, MARCH 11, 1953.

COAL MINE SAFETY BOARD OF REVIEW

WITNESSES

ALEX U. MILLER, CHAIRMAN, FEDERAL COAL MINE SAFETY BOARD OF REVIEW

TROY L. BACK, SECRETARY, FEDERAL COAL MINE SAFETY BOARD OF REVIEW

SALARIES AND EXPENSES

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions			5
Full-time equivalent of all other positions			1
Average number of all employees			6
Average salaries and grades:			
General schedule grades:			
Average salary			$6,983
Average grade			GS-10.0
01 Personal services:			
Permanent positions			$34,915
Part-time and temporary positions			18,000
Total personal services			52,915
02 Travel			11,000
03 Transportation of things			50
04 Communication services			2,870
05 Rents and utility services			1,500
06 Printing and reproduction			2,000
07 Other contractual services			10,000
08 Supplies and materials			2,500
09 Equipment			2,000
15 Taxes and assessments			165
Obligations incurred			85,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Obligations incurred during the year			$85,000
Deduct unliquidated obligations, end of year			10,000
Total expenditures (out of current authorizations)			75,000

Mr. FENTON. We have the pleasure of having with us, Mr. Miller, Chairman of the Federal Coal Mine Safety Board of Review, Mr. Back, secretary and Mr. Forsythe, general counsel.

Mr. Miller, you are present to justify your request for appropriations for the fiscal year 1954. We gave you a supplemental for 1953 of $20,000, now you are asking for $85,000 for 1954.

Mr. MILLER. Yes, sir.

Mr. FENTON. We will insert pages 5 through 8 of the justifications into the record.

(The matter referred to follows:)

SALARIES AND EXPENSES

01 *Personal services.*—The following are the essential facts with respect to this item of expenditure:

Title	Grade	Salary	Number of positions	Aggregate
Board members		[1] $50	3	$18,000
Secretary of the Board	GS–15	10,800	1	10,800
Chief legal counsel	GS–15	11,050	1	11,050
Administrative assistant	GS–9	5,185	1	5,185
Clerk (stenography)	GS–7	4,955	1	4,955
Clerk-typist	GS–4	3,175	1	3,255
Total			8	53,245

[1] Per diem, when actually employed.

NOTE.—These positions are the minimum required for the normal functioning of the Board.

02 Travel expenses.—The $7,870 included in this item includes $7,000 for the Board members and $870 for transportation and subsistence for the secretary and chief legal counsel of the Board.

03 Transportation of things.—This nominal sum of $50 is requested to defray any costs which may arise in connection with the shipment of files, records, documents, or other items required in connection with the holding of hearings outside of Washington, D. C.

04 Communication services.—The $2,000 requested for this item includes $800 for telephone operators (paid on a pro rata basis) and station equipment rental, $1,130 for long distance calls and telegrams, and $70 for air mail, special delivery and other postage stamps.

05 Rents and utility services.—On occasions hearings will be held at various points throughout the coal producing areas of the Nation. In view of the lack of available Federal hearing room space in some areas, space will have to be rented for some hearings. The sum of $1,000 is requested to cover such costs.

06 Printing and reproduction.—The $1,470 requested for this item includes the cost of administrative forms, letterheads, envelopes, standard forms, etc.; the annual report to Congress; and the printing of regulations and issuances of the Board.

07 Other contractual services.—The $6,500 requested for this item includes an estimate of $2,500 for stenographic reporting services, $4,000 for fees and expenses of witnesses summoned by the Board.

08 Supplies and materials.—The $1,700 requested for this item includes the cost of all office supplies and commodities usually required in an agency of this kind.

09 Equipment.—The $1,000 requested in this item would provide funds for the purchase of any new equipment required and to replace any equipment that was obtained from other Government agencies on a loan basis with the understanding that the Board would replace such items upon request. The value of the equipment obtained on this basis is $3,570.

15 Taxes and assessments.—The $165 requested for this item will provide funds for the payment of the employer's tax required to be made to the collector of internal revenue under the Federal Insurance Contributions Act. This tax will be on $3,600 of the amount earned by each of the three Board members.

Mr. FENTON. Mr. Back, will you go through those various items and show the application of the decrease in the revised budget so that the record will show that your request is for $75,000?

GENERAL STATEMENT

Mr. MILLER. I am glad to have this opportunity to make my first personal appearance before your committee. Unfortunately, the illness of my wife prevented my attending the hearing in connection with the Board's request for a supplemental appropriation.

The Board is in little better position with respect to cost experience than when it was represented before your committee last month, and, of course, it still does not have any control over its workload.

The budget estimate which you have before you in the amount of $85,000 is our best estimate of the Board's operating expense for fiscal year 1954. However, we were directed by the Bureau of the Budget this morning to reduce the amount in our request to $75,000. This is a reduction of $10,000 or approximately 11.8 percent from the original estimate.

The Board accepts this reduction and will make a sincere effort to carry out its statutory duties at a cost within the remaining $75,000. It is quite obvious, however, that the lack of control over its workload makes it impossible for the Board to give positive assurance that this objective can be attained.

The Board is anxious to operate as economically as is consistent with the carrying out of its statutory duties and it will work toward that objective. This can be accomplished in part by utilizing the services and facilities of larger agencies wherever possible on a reimbursable basis where required. This policy is now being followed.

By the end of fiscal year 1954 the Board should be able to make a fairly accurate estimate of its future workload and the amount of the appropriation necessary to handle it.

That is all of our statement, and if you desire, we will try to answer any questions we can.

FUNCTION OF THE BOARD

Mr. FENTON. Describe briefly, Mr. Miller, the function and organization of the Board, for the record.

Mr. MILLER. The Federal inspectors go out and make inspections of coal mines, and if they find what they term is an "imminent danger," that is, where an explosion or disaster killing five or more men may happen immediately, they will issue an order withdrawing the men from that area until the condition is abated. Or they may go in and make an inspection and find a condition which may not create an immediate hazard. Then they will issue a finding. That gives the operator a certain length of time to remedy that condition, and if he does not remedy the condition within that stated time, then the inspector will issue an order. The operator can appeal an order to the Director of the Bureau of Mines or he can appeal direct to us, and then we will set a time for the trial or hearing of that order, and then we will render a decision whether we will deny the application of the operator or whether we will sustain it. That in a general way covers our particular work. However, we have no control over the work that comes to us and we can't go out and make inspections. We have got to take the evidence that is presented by the operator, and the Director of the Bureau of Mines, and we will base our decision on that evidence.

Mr. FENTON. I think we understand that pretty well. Mr. Ferguson appeared in your place during the supplemental hearings, and he gave us an explanation of the functions.

ORGANIZATION OF THE BOARD

Now, while we don't want to be repetitious with this, this is an entirely new hearing, and aside from a description of the functions you have briefly given, would you mind describing the organization of the Board for the record.

Mr. MILLER. The Board in itself is composed of 3 members, 1 representing the operators, 1 representing the miners, and 1 representing the public. Mr. Ferguson represents labor, Mr. Solari represents the operators and myself representing the public. Now that is the three Board members. We have a secretary on steady. We have a chief legal counsel who is employed permanently, and we have three girls in the office. That is going to complete, insofar as we know now, our Board organization. We will have five members that are paid by the month or by the year, and the Board members are only paid when they are on active duty.

WORKLOAD

Mr. FENTON. What has been the workload to date?

Mr. MILLER. So far as we have handled three cases. In those three cases we found that the work varies to some extent. After totaling up the expense of our first real case, we thought about $600 would cover a case or a hearing, but then with this last case we had, we had more witnesses than we thought; then we had an attorney representing the appellant, and it was prolonged to some extent, due to the examination, and one thing and another, and I figure if we get a case where there are a number of witnesses and we have lawyers like this fellow, the load may run into 7 or 8 days per Board member. That is the reason why we can't tell what our load will be.

Mr. FENTON. Up to date you have had three?

Mr. MILLER. Yes, sir.

Mr. FENTON. And disposed of those?

Mr. MILLER. Yes, sir.

Mr. FENTON. Does the Bureau inform you of the number of violations made?

Mr. MILLER. You mean voluntarily?

Mr. FENTON. Yes.

Mr. MILLER. Mr. Back generally looks after that. He can give you information on that.

Mr. BACK. Yes, they give us that information at the end of each month, or sometime up in next month covering the number of findings that their inspectors issued the previous month and the number of orders issued pursuant to each section and subsection that were issued the previous month.

Mr. FENTON. Have you any way of telling what the potential is on orders?

Mr. BACK. We know the total number of orders issued to date. As of yesterday there had been 82 orders issued; 7 of these were under section 203 (a), 43 under section 203 (c), and 32 under 203 (d).

Mr. FENTON. Describe those.

Mr. BACK. Seven issued under 203 (a) were issued where an inspector found imminent dangers. The 43 that were issued pursuant to section 203 (c) were issued after time had been given the operator to correct the conditions and he had not corrected them within the

time specified. The 32 that were issued pursuant to section 203 (d) were orders classifying mines as gassy and did not mean that the mine was closed.

Mr. FENTON. Have you any way of anticipating that you will get an appeal from the operator?

Mr. BACK. No, sir; I don't know of any way that we could anticipate that. We don't know how many are going to accept those orders and how many feel it is unreasonable and they want to appeal. There is no way the Board has of knowing.

Mr. FENTON. Of those eighty-some-odd, you have only had to try three cases?

Mr. BACK. Yes, sir; to date. I do not know how many orders are outstanding. I don't have that figure, on how many might be appealed. I don't know that.

Mr. FENTON. I think that, in view of the request for $75,000 and the workload you may accumulate, we have about all the data we need.

Mr. MILLER. May I say something else regarding our workload. We are in a rather unusual situation, as I view it. According to law, we have got to be ever ready, and if a case comes up we have got to process that case immediately. That is particularly true if a mine is shut down. For example, there is a mine in Pennsylvania, with some 2,500 employees there——

Mr. BACK. Or maybe more.

Mr. MILLER. New Orient mine, where they had that big disaster. There were around 1,100 working in that mine. If you had a closing order, it means you will have a great loss of tonnage, and the delay in getting the order processed or hearing put through would cause that mine to be down that much longer, causing a hardship on the operator and the men. Again, if we are in war and need the coal badly, it would cast a hardship possibly on the country. When we get an order we have got to be prepared to set a date right now, which we have been doing.

Mr. FENTON. Thank you very much, gentlemen.

THURSDAY, MARCH 19, 1953.

BONNEVILLE POWER ADMINISTRATION

WITNESSES

HON. FRED G. AANDAHL, ASSISTANT SECRETARY OF THE INTERIOR FOR WATER AND POWER
DR. PAUL J. RAVER, ADMINISTRATOR
S. E. SCHULTZ, CHIEF ENGINEER
EARL D. OSTRANDER, CONTROLLER
W. A. DITTMER, POWER MANAGER
EARL GOLDHAMMER, DIRECTOR, BRANCH OF BUDGET MANAGEMENT
SIDNEY D. LARSON, DIRECTOR OF BUDGET AND FINANCE DIVISION, DEPARTMENT OF THE INTERIOR

Mr. JENSEN. The committee will come to order. We have before the committee this morning Dr. Raver, Administrator of the Bonneville Power Administration and several members of the Bonneville

Power Administration staff, and we also have before the committee our former colleague and friend, the Honorable Fred Aandahl of North Dakota, who is now Assistant Secretary of the Interior, and who is Acting Chief of the Bureau of Reclamation.

Governor, we are happy to have you back in Washington with us. Governor Aandahl, as all of you know, came to Congress in 1951, and in a very short time we made him a member of the workshop of Congress, the Appropriations Committee. He used to sit on this side of the table. He is supposed to sit on the other side of the table, but since the other side of the table is so full I thought the Governor would feel a little more at ease, a little more comfortable, sitting on this side of the table for the time being.

Anyway, Governor, we welcome you.

Mr. AANDAHL. Thank you.

Mr. JENSEN. We welcome you back to Washington and back to the Interior Department. You have a lot of problems to handle in your Department, and they are important problems. I do not have to tell you that there an awful lot of American people who are greatly interested in what the Interior Department does, in what this committee does, and what the Congress does, especially those in the 17 Western States, so far as reclamation is concerned.

We sit here for weeks on weeks going through these hearings, attempting to learn as much as we can about the Department so that we may appropriate intelligently and properly, and that is what we are going to do today. We have Dr. Raver sitting across the table who, I presume, would like to make a statement at this time. Dr. Raver.

GENERAL STATEMENT

Dr. RAVER. Mr. Chairman, and members of the committee, prior to the current fiscal year the Bonneville Power Administration has been marketing power generated at only two Federal projects, namely Bonneville Dam and Grand Coulee Dam.

Beginning in 1953, however, and continuing over the next few years, several new Federal dams will be placed in service as a part of the system for which the Administration is the transmission and marketing agent. These include Detroit, on the Santiam River in Oregon, a flood-control dam primarily, Big Cliff Dam which is just below Detroit Dam which is a power dam, Lookout Point and Dexter Dams also in the Willamette Valley; Hungry Horse Dam in western Montana on the South Fork of the Flathead River, which is a storage dam for power and flood control; Albeni Falls Dam in northern Idaho for power and flood control, Chief Joseph Dam on the main stem of the Columbia just below Grand Coulee, which will be one of the largest power producing projects in the Northwest system, and McNary Dam on the main stem of the Columbia River, which is nearing completion, a navigation and power dam primarily with a large block of power coming in, and two small projects, the Chandler and Roza projects in the Yakima Valley which are being developed in connection with reclamation programs there.

A good deal of our present program is predicated upon the construction of a transmission system that will make possible the delivery of power from these new projects to load centers. This substantial increase in the scope of the system increases the complexity of many of the Administration's problems. This is true not only as regards

operation and maintenance of a more extensive transmission system, but it is true in regard to the integration of both the Federal and non-Federal projects in the Northwest into an operating pool, and it is true, moreover, with respect to such administrative problems as power marketing, accounting, allocation of costs as between power, navigation, flood control, and irrigation, and the repayment of those costs.

The following comparisons of the Administration's power supply, transmission lines, and gross revenues indicate the type of growth which is projected for the Pacific Northwest, based on these new projects which are under construction and, I presume, will be completed.

SYSTEM CAPACITY

In the year 1953, take our total peaking capacity, for example, and note how that will grow from these new projects. It increases from 2,573,000 kilowatts in 1953 to 7,814,000 kilowatts in 1960.

Mr. BUDGE. Doctor, could I interrupt you there? Would not the committee get the picture better if we had the firm power rather than the peaking power?

Dr. RAVER. I can give you that. I do not happen to have it on this table in front of me, but we have those figures.

Mr. BUDGE. As I understand it, your peaking power would be fluctuating?

Dr. RAVER. The peaking power indicates the amount of generating capacity which is installed in the dams.

Mr. BUDGE. But it may not be the amount of electricity that you are able to distribute. It seems to me that the committee would be interested in getting the amount of firm power which you are able to distribute.

Dr. RAVER. I can give you that. It might be that we have the figures here immediately.

Mr. DITTMER. We have the advance program which gives the firm power year by year.

Dr. RAVER. May I prepare that and present it to you a little later, Mr. Budge? We have it, but I do not have it in front of me at the moment.

Mr. BUDGE. I would appreciate it, Doctor, for this reason. When you speak of peaking power that is a potential which you may or may not have, as I understand it, but when you speak about primary or firm power it is my understanding that is the actual thing that you sell; is not that right?

Dr. RAVER. That is essentially correct except that peaking capacity is the capacity we do have for peaking purposes. There is not any question about our ability to use it for peaking purposes, but our ability to use it 24 hours a day, and 365 days out of the year, which is our firm capacity, in a minimum water year depends on the amount of water that we have, which is another variable in this picture.

Mr. BUDGE. Yes.

Dr. RAVER. Our firm power capacity averages will depend on how much storage capacity is put into this system.

Mr. BUDGE. If we could have what the details are it would certainly clarify it for me.

Dr. RAVER. I would be very glad to present it.

(The matter referred to follows:)

Year	Total kilowatt peaking capacity [1]	Total kilowatt prime capability [1]	Total kilowatt-hours	Total circuit miles transmission lines	Total gross revenue
			Billions		
1953	2,573,000	1,697,000	15.9	5,693	$38,300,000
1954	3,043,000	1,996,000	18.7	6,491	45,700,000
1955	3,499,000	2,500,000	22.3	6,744	53,600,000
1956	4,196,000	2,894,000	26.2	7,456	62,800,000
1957	4,865,000	3,142,000	28.2	8,000	69,800,000
1958	5,636,000	3,525,000	32.1		79,300,000
1959	6,538,000	4,010,000	37.1		90,700,000
1960	7,814,000	5,462,000	48.0		115,700,000

[1] Based upon schedule V.

Dr. RAVER. I was merely trying to give the overall picture here, if I may at the moment, as to what it looks like in terms of generating capacity.

The machine capacity installed in this system on the basis of the present program, which is going forward, that is, in dams which are under construction now, in other words, from 1953 until 1960, the total peaking capacity of the Federal system will be increased about two and a half times under this present program.

Mr. JENSEN. Over a period of how many years?

Dr. RAVER. That is a period of 7 years.

Mr. JENSEN. Go ahead.

KILOWATT-HOURS GENERATED

Dr. RAVER. And the total number of kilowatt-hours generated from that capacity, and if I may call this to your attention, Congressman Budge, the kilowatt-hour figure indicates what we would be able to sell.

Mr. BUDGE. Yes; I understand that.

Dr. RAVER. And the number of kilowatt-hours will increase from 16 billion in 1953, that is the current year that we are now in, to 48 billion in that same period.

Now, that is something of a reflection of how much power we can sell, at least out of those generators.

Mr. BUDGE. Those are the eggs which go across the counter, that you get paid for?

GROSS REVENUES

Dr. RAVER. That is right; and the total gross revenues from the sale of that power will increase from $38,300,000, which is our estimated gross revenue figure for this year 1953 and, incidentally, that is about $1,930,000 lower than our gross revenue figure that we had last year because of the dry-weather spell we had this last fall. However, for the year we are in now, we estimate that by June 30 we will have revenues of $38,300,000 and in 1960 at the same wholesale rate that we are now charging, without any increase in rates, and I should state there parenthetically that we are planning on increasing our rates in 1954, but on the same schedule we are now charging, in 1960 those gross revenues would be $115,700,000.

I wanted to present that to you because there is in this year, as in each of the years, a program that is flowing or going forward. If it is not going forward for any reason, of course those pictures change and our picture for this year changes and if that is a program that is to continue to go forward, then what we are doing this year is merely a part of that program, and I think it is proper to consider it in that perspective.

The table that I have here, and that I would like to put in the record, gives those figures for each of the years. I am merely giving you the beginning and the end figures.

BUDGET REVISIONS

The appropriation estimates which you gentlemen have before you for the Bonneville Power Administration total $62,600,000 as compared with the $73,123,400 provided by the Congress in the 1953 appropriation act. This is a net reduction of $10,523,400 in the appropriation request, as compared with the appropriation granted last year.

As you know, the Administration was requested along with the other governmental agencies to review its proposed program for the fiscal year 1954 and to submit possible reductions in estimates by the elimination of lower priority work and by the adoption of more efficient and effective methods. The Bonneville Power Administration has found it possible to produce a total further savings of $2,671,000 in the fiscal year 1954.

Now, in addition, in the past several weeks we have achieved an additional savings of $1,900,000 in the fiscal year 1953 which will make this amount of money available for use in prosecuting the 1954 program. In other words, that would be carryover money that we now know will be available.

These latter savings result from contractors' bids for materials, principally for structural steel, which were opened this month. Thus we can report to you a net reduction of $4,571,000 for construction and $200,000 in operation and maintenance under the amount that is before you in our appropriation request.

Now, I have a further detailed statement about the program which I would be glad to file for the record, Mr. Chairman, unless you want me to read it.

Mr. JENSEN. Is it a financial statement on your operations, on the operations of the Bonneville Power Administration?

Dr. RAVER. It goes to the construction and generating capacity program in a little more detail, the highlights of the construction program and the operation and maintenance program, rather than being a financial statement.

Mr. JENSEN. How voluminous is it? Is it just those pages?

Dr. RAVER. Yes, sir.

Mr. JENSEN. Without objection we will put it in the record.

(The matter referred to is as follows:)

GENERATION AND LOADS

This year the January peaking capability of the Bonneville, Grand Coulee, and Hungry Horse projects, including use of Albeni Falls storage, is 2,573,000 kilowatts. In January 1957, under present schedules for construction, peaking capability will increase to 4,865,000 kilowatts, as shown on the following table:

[Thousands of kilowatts]

	January peaking capability	Prime power
Present system	2,573	1,697
Additions by fiscal years:		
1954	470	299
1955	456	504
1956	697	423
1957	669	282
Total additions	2,292	1,508
Total system, 1957	4,865	3,205

The program of the Administration for fiscal year 1954 provides for the delivery of this additional power from new sources of generation to load centers.

As I have reported to you in the budget justification book, starting in September the Pacific Northwest experienced a critical power shortage. This shortage was the result of insufficient rainfall in the region during the summer and autumn. Many parts of the region have witnessed the driest period of record. Early in September 1952 poor streamflow conditions made it necessary for the Bonneville Power Administration to curtail the interruptible power loads of its customers. By September 6, 1952, the entire interruptible load (383,000 kilowatts) on the Bonneville system was curtailed. Later as the regional power supply became more critical the Defense Electric Power Administration found it necessary to issue DEPA Order EO–4A on October 30, 1952. This order, affecting all power utilities in the region, provided a quota limitation on power uses by customers using more than 8,000 kilowatt-hours per week. Beginning November 17, 1952, these customers of firm power were limited to 90 percent of the amounts they respectively used the previous year during the same period. The curtailment reduced the firm load in the region by approximately 110,000 kilowatts. Early in January 1953 warm weather and heavy rainfall increased streamflows sufficiently so that the Defense Electric Power Administration suspended the curtailment order. All firm power loads in the region can now be served for the remainder of the storage control period, and a considerable part of the interruptible power loads can also be carried. During the week of January 18 there were approximately 200,000 kilowatts of steam resources available in the region.

The power projects now under construction, both Federal and non-Federal (see the accompanying tables I and II) in the region will alleviate this condition. Current estimates of loads and resources indicate that all firm power requirements of the region will be met during the 1953–54 through the 1956–57 season. By 1956–57 about 1,400,000 kilowatts average over the storage season under minimum water year conditions will be provided from the Federal system from these additional generation installations. About 500,000 kilowatts of this increase has been committed by the Administration for defense industrial purposes, including the expansion by the Federal Government of the Atomic Energy Commission program at the Hanford Engineering Works. These commitments are for specific amounts of power and are covered by contracts on agreements to enter into contracts.

After use of their own resources as scheduled and with allowance for reserves, in 1956–57 the estimated requirements of public agencies and cooperatives, which have preference under the Bonneville Act, will be approximately an additional 210,000 kilowatts of firm power from the Federal system. This estimate is based upon load analyses, but since these agencies have contracts in which the Administration is committed to serve their requirements, the actual amount of power to be delivered may vary somewhat from the amounts estimated.

After meeting the above requirements, the Administration will have available an additional 550,000 kilowatts of firm power to meet the requirements of the private utilities for the season of 1956–57 with reserves. After meeting all these

requirements, if all of the projects in the Federal and non-Federal program go forward on schedule, there would be about 120,000 kilowatts to meet new industrial requirements for the region. This is only a fraction of the estimated potential industry that would come to this area by 1956-57 if power were available; we estimate that 1,200,000 kilowatts of firm power could be sold to expand the industrial economy of the region. It must be recognized that this is based on the most optimistic prospects for power in the Northwest, and that it depends upon completion of dams now under construction and proposed for construction on schedule.

Beyond that period, however, after The Dalles project is completely installed, the power supply picture will again worsen very rapidly unless new projects are constructed. To meet increasing load requirements, it is necessary to lay out a program for starting new power projects.

At least 4 or 5 years are usually required from the initiation of construction to complete major multipurpose structures of the type in the Columbia Basin which are needed to provide power in the Northwest.

Some of the projects should be upstream storage plants which will improve the production of plants now in operation and under construction. It is also necessary that planning activities proceed now so that an orderly and economical program may be developed for the construction of new plants, both on the main stem of the Columbia River and on its major tributaries.

NON-FEDERAL GENERATION

A number of non-Federal power developments have been undertaken or are being considered by local utilities to increase power supply of the region. The first stage of the expansion of the Rock Island plant by the Chelan County Public Utility District under an agreement with the Puget Sound Power & Light Co. was completed in September 1952. When completed in May 1953 it will supply about 150,000 kilowatts, chiefly for a new aluminum reduction plant of the Aluminum Company of America at Wenatchee, Wash. Washington Water Power Co. will complete the installation of generating uints in April 1953 at the Cabinet Gorge Dam in northern Idaho with an installed capacity of 200,000 kilowatts, and the Pacific Power & Light Co. is completing the Yale project on the Lewis River with an installed capacity of 108,000 kilowatts. Portland General Electric Co. has a license from the Federal Power Commission to construct the Pelton project of 120,000-kilowatt capacity on the Deschutes, but is now involved in litigation in the courts due to an adverse decision of the State hydroelectric commission. This company is also contemplating construction of the Round Butte project of 225,000-kilowatt capacity on the same river above Pelton. The city of Seattle has under construction on the Skagit River an expansion of the Ross project which will increase the usable storage and permit operation in this winter of two units with a total nameplate rating of 180,000 kilowatts; a third 90,000-kilowatt unit is scheduled to be completed by September 1953. The city of Tacoma is still involved in litigation on two Cowlitz River plants in the State of Washington which would have an installed rating of 460,000 kilowatts. The Pend Oreille Public Utility District is constructing Box Canyon Dam on the Pend Oreille River, to be completed in 1954 with an installed capacity of 60,000 kilowatts. California Oregon Power Co. is constructing four plants in the North Unpqua River Basin, to be completed between 1953 and 1955, with total installed capacity of 103,000 kilowatts. The output of these projects will measurably improve the power supply situation, and has been taken into account in our analysis of loads and resources, but the region will still depend for major additions to its power supply upon the Federal hydroelectric plants.

TRANSMISSION FACILITIES

Construction funds are requested so that the transmission system may keep pace in growth with the added generating capacity at the Federal dams and with the correspondingly increased power requirements of the major load centers in the area. Every endeavor has been made to achieve maximum economies through improved system design and the use of new engineering developments. Particular emphasis is placed in the current budget program on the use of what is believed to be the highest transmission voltage currently contemplated by any power agency in the country. With the introduction of 300,000 and 345,000 volt transmission lines, it now appears possible to transmit from 2 to 3 times as much power per circuit as compared to conventional practices several years ago with substantial benefits in transmission economy.

In the preparation of the current program, the Administration has worked closely with the local distributors and the interconnected public and private utility systems in the area to meet the load requirements at the lowest overall cost for new facilities.

OPERATION AND MAINTENANCE

During fiscal year 1954, the Administration will install 795 circuit miles of transmission lines, 14 new substations. Substation capacity on the system will be increased 603,000 kilovolt-amperes; 14 new customers are expected to be served and 29 new points of delivery are planned. Fiscal year 1954 will be the first full year of service in western Montana by the Administration, and completion of facilities to Klamath Falls in December 1953 will extend the Administration's operating and maintenance activities into that territory.

Over 81 percent of the total increase requested for operations and maintenance activities will be for direct system work. The remaining 19 percent of the increase will be for business and administrative activities related to the increased facilities and greater supply of power.

SUMMARY OF ACTIVITIES IN FISCAL YEAR 1952

In fiscal year 1952, the Administration marketed 17 billion kilowatt-hours of electric energy, or more than 60 percent of the power produced in the Pacific Northwest. This was achieved due to favorable water conditions, which boosted the Administration's revenues to $40,180,146, nearly $4 million higher than the previous year. Net revenues after deduction of all current year expenses for operation, maintenance, administration, marketing, depreciation, and interest were $15,890,642, nearly 10 percent higher than for fiscal year 1951. This brings the cumulative total of net revenues during the Administration's existence to $83,578,662 on June 30, 1952.

TABLE I.—*Additions to the existing Federal system in period January 1953–57—Schedule V,*[1] *hydro projects*

Project	Initial date in service	Additional thousands of kilowatts: Installed capacity [2]	January peaking capability	At site prime power [3]	Downstream benefit from new storage [4]
Detroit	June 1953	100	92	31	
Hungry Horse [5]	August 1953	142	149	180	162
McNary	December 1953	980	1,127	492	
Big Cliff	April 1954	18	21	11	
Albeni Falls [6]	August 1954	43	18	21	
Lookout Point (Meridian)	October 1954	114	91	25	
Dexter	April 1955	15	17	8	
Chandler	September 1955	12	12	11	
Chief Joseph	do	512	589	499	
Roza	October 1956	10	10	5	
Total		1,946	[7] 2,126	1,283	162

[1] Excluding Bureau of Reclamation projects in the Upper Snake Basin.
[2] Name-plate rating added January 1953 to January 1957.
[3] Prime power is average power over storage release season without new storage.
[4] Storage benefit from the Hungry Horse project is effective over the 1956–57 storage release season at downstream plants as follows:

	Thousands of kilowatts
Albeni Falls	5
Grand Coulee	101
McNary	34
Bonneville	14
Chief Joseph	8
Total	162

[5] 2 units of 142,500 capacity available by January 1953.
[6] 1,140,000 acre-feet of storage available for season of 1952–53.
[7] Is 2,193,000 kilowatts with increased peaking capability added at Grand Coulee by new upstream storage.

TABLE II.—*Additions to non-Federal utilities scheduled in period January 1953–57, hydro projects*

Project	Additional thousands of kilowatts			
	Initial date in service	Installed capacity [1]	Added January peaking capability	Added prime power [2]
City of Seattle: Ross,[3] units Nos. 2 and 3	March 1953	180	155	32
Washington Water Power Co.: Cabinet Gorge,[3] Unit No. 4.	April 1953	50	57	24
Chelan County PUD: Rock Island,[3] units Nos. 8, 9, 10.	February 1953	75	83	70
California Oregon Power Co.:				
Clearwater No. 1 [3]	April 1953	15	15	4
Clearwater No. 2 [3]	July 1953	26	26	8
Lemolo No. 1	December 1954	29	29	15
Lemolo No. 2	December 1955	33	33	15
Idaho Power Co.:				
Guffey	October 1953	30	30	23
Dike	April 1954	68	68	33
Pend Oreille PUD: Box Canyon [3]	July 1954	60	60	52
Portland General Electric Co.:				
Pelton	September 1954	120	120	45
Round Butte	September 1955	225	225	83
Montana Power Co.: Kerr,[3] unit No. 3	October 1954	56	60	41
City of Tacoma:				
Mayfield	December 1954	160	160	76
Mossyrock	February 1955	300	193	92
Total		1,427	1,314	[4] 613

[1] Nameplate rating added January 1953 to January 1957.
[2] Prime power is average over regional storage release season.
[3] Under construction.
[4] Is 621,000 kilowatts with prime power added at station B and Yale which operated through only part of 1952–53.

FINANCIAL PROGRAM

Dr. RAVER. I would like to discuss the financial program with you when you are ready to have me do it.

Mr. JENSEN. We want that right now so that we can have a picture of it at the outset of the hearings.

Dr. RAVER. If I might do so, I would like to place before the committee in connection with our financial statement copies of our annual report, which contains the complete financial picture as audited by Arthur Andersen & Co. of Chicago, and also contains various financial tables. I would like to summarize those, and if you could have the report in front of you I can refer to the pages in the report if you are interested in following them.

Mr. JENSEN. All right.

Dr. RAVER. The first page is page 2 in the report, which follows the letter of transmittal.

REVENUES AND EXPENSES

On page 2 you will find a condensed summary of the revenues and expenses. For the fiscal year 1952 our operating revenues were $40,180,146, which were about $4 million higher than in the previous year.

The total operating revenues to June 30, 1952, were $265,253,885.

Then follows the details of the expenses of operation, maintenance, and so forth, provision for depreciation, interest expense, and miscellaneous deductions.

INTEREST EXPENSE

Mr. JENSEN. Now, explain that interest expense. Explain what you mean by interest expense.

Dr. RAVER. We include as part of our cost interest on the investment at the rate of 2½ percent on all of that investment at Bonneville Dam and in our transmission system devoted to power or allocated to power, and on all of that portion of Grand Coulee Dam which is allocated to power.

Mr. JENSEN. It is known as the interest component.

Now, what do you do with it?

Dr. RAVER. All of this money goes into the Treasury of the United States.

Mr. JENSEN. So, in the fiscal year 1951 you paid into the Treasury of the United States $6,532,009?

Dr. RAVER. That is right.

Mr. JENSEN. And in the fiscal year 1952 you paid in $7,608,214. Now, for the fiscal year 1953 what is your estimate?

Dr. RAVER. If you will turn to schedule 16 at the rear it is about the second page from the end, Mr. Chairman, you will find this interest shown on the chart for each year, and for the year 1953 the interest component is $10,732,000.

Mr. JENSEN. That is estimated for 1953?

Dr. RAVER. That is right.

Mr. OSTRANDER. We have revised that slightly upward, Dr. Raver, since this was made up, to $10,874,000.

Dr. RAVER. All right, and for the year 1954, do you have that estimate?

Mr. OSTRANDER. That is $16,305,000.

Mr. JENSEN. That is a little bit far in the future. Let us stay with 1953.

Dr. RAVER. Very well. The total interest collected up to June 30, 1952, is $63,317,674 on that same table.

Mr. JENSEN. Without objection, the table appearing on page 2 of your report for 1952 will be placed in the record at this point.

(The matter referred to is as follows:)

Columbia River power system—Condensed summary of revenues and expenses

	Fiscal year 1951	Fiscal year 1952	Total to June 30, 1952
Operating revenues	$36,189,028	$40,180,146	$265,253,885
Expenses of operation, maintenance, etc	8,657,494	9,367,657	70,846,950
Provision for depreciation	6,496,777	7,147,815	44,788,565
Interest expense	6,532,009	7,608,214	63,317,674
Miscellaneous deductions, net	7,196	165,818	1,270,441
Total deductions	21,693,476	24,289,504	180,223,630
Surplus net revenues from power operations	14,495,552	15,890,642	85,030,255
Adjustment for prior years' pension costs: [1]			
Expenses of operation, maintenance, etc		1,117,173	
Interest expense		334,420	
Total adjustment		1,451,593	1,451,593
Amount carried to accumulated net revenues		14,439,049	83,578,662

[1] See text report for explanation.

Dr. RAVER. I might point out on that same table that our surplus net revenues from power operations for the fiscal year 1952 were $15,890,642, so that the total surplus net revenues from power operations to June 30, 1952, from the beginning of our operations were $85,030,255.

In the year 1952 we made an adjustment in this surplus to take care of additional costs. In the past the Government's cost of the civil-service retirement system has not been carried as a cost in our cost-accounting procedure because we had no way of getting at what that specific cost was. We have succeeded in getting those figures broken out from the civil-service records, is that correct?

Mr. OSTRANDER. We obtained information from the Retirement Division of the civil-service organization as to the rate of cost that should be included to cover the Government's contribution to the retirement system.

Dr. RAVER. We have covered that back from the beginning of our operations now so that the total cost of our operations has been increased from the beginning down to date by the amount shown as deduction from surplus in 1952. The total adjustment was $1,451,593.

So far as revenues were concerned, part of the adjustment has been capitalized, Mr. Chairman—put into capital account—but the amount carried to accumulated net revenues for the year 1952 is $14,439,049 after adjusting past costs to pick up the retirement-system costs.

Now, in this chart we give you a picture of where our revenue dollar is going.

For the fiscal year 1952, which is the only year represented on this chart, operation and maintenance expenses constituted 23.31 percent.

The interest expense was 19.35 percent, and the balance was available for repayment to the Federal capital investment; namely, 57.34 percent. In other words, out of our revenue dollar the Federal Government got back 57.34 percent plus 19.35 percent, or about 76.7 percent either in the payment of interest or surplus for repayment of investment. The depreciation charge is also included in that as being available for repayment of investment.

DEPRECIATION RATE

Mr. JENSEN. What percent of depreciation do you charge off each year?

Dr. RAVER. We use standard rates for different types of property, depending upon property lives which are more or less accepted in the industry.

Mr. JENSEN. What is the estimated life of one of those large generating units in Grand Coulee, for instance?

Dr. RAVER. I think it is around 35 years.

Mr. OSTRANDER. Thirty-five years is being used.

Dr. RAVER. That is the rate at which we depreciate it actually, 35 years.

Mr. JENSEN. During that 35 years what is the estimated percentage for repair bills?

Dr. RAVER. As to the maintenance of those machines at the dams, I do not have the figure broken out for generators. It will run about $1 a kilowatt—will it not, Mr. Schultz?—a year for maintenance and operation.

Mr. OSTRANDER. It will not run that high. The maintenance on those is not very great.

Dr. RAVER. That is a rough figure for maintenance and operation of hydrostations.

Mr. JENSEN. When the time comes when it is necessary to replace those units, that will be the time when the dams will really start costing money to maintain them in operating condition at full capacity.

Dr. RAVER. The maintenance will go up as the generators get older.

Mr. JENSEN. Those generators really cost money, do they not?

Dr. RAVER. Yes; those generators cost about $3 million apiece, I think.

Mr. JENSEN. How many do you have in Grand Coulee?

Dr. RAVER. Eighteen.

Mr. JENSEN. You have 18 in Grand Coulee?

Dr. RAVER. Yes. We have 10 at Bonneville.

Mr. JENSEN. And how many large generators do you have at your other dams?

Dr. RAVER. Well, 14 generators are scheduled, as I recall for McNary Dam, and 16, I believe, at Chief Joseph. They all have a lot of generators in them. Hungry Horse Dam only has four.

Mr. JENSEN. Four?

Dr. RAVER. Yes.

Albeni Falls Dam will have 3, I believe; Detroit Dam will have 2. As to Lookout Point Dam, I do not remember; I think it is 3.

Mr. JENSEN. There are approximately 70 units that will average around $3 million apiece. You know, that is a thing I think we have to look forward to, to having a fund ready to take care of that terrific expense. There is 70 times $3 million. That is $210 million that we can expect to spend in possibly 30 years for new generators.

Dr. RAVER. We are accumulating that fund. That is what this financial picture does for us.

Mr. JENSEN. That is a lot of money. That is just to replace the generating units, and you have all of your other units and machinery that are also going to take a lot of money.

Dr. RAVER. That is the reason this operation is placed strictly on a cost-accounting basis, because it is only on that basis that these accounts reflect the wearing out of machinery and the accumulation of funds eventually to replace the equipment in the whole system.

We follow not only the procedure of setting up a depreciation fund to replace those units as they retire but, in addition, we are doing something that no privately financed operation would do: We are actually paying off the debt in addition to setting up a fund to keep that investment intact.

Mr. JENSEN. Of course, you can do that where private industry would have a difficult problem doing it, because of the fact that they pay on the average each year around 4 mills in local, State, and Federal taxes on every kilowatt of power they market. If they were to attempt to set up a fund such as you speak of, their rates would, necessarily, have to be considerably higher.

Dr. RAVER. I am not arguing against the way they are doing it, but I do think the Government should take credit for the fact that we are not only following the strict cost-accounting procedure of a private utility company but that our rates are also required to actually retire

the debt in a 50-year period, which is a pretty serious additional cost that the ratepayers are bearing.

Mr. JENSEN. Of course, there is no use in you and I getting into this discussion again, but if the Bonneville Power Administration would pay Federal taxes in the amount that the private utilities pay Federal taxes then, of course, we would have a big revenue coming into the Treasury every year from the Bonneville Power Administration that would be many times more than you now pay into the Treasury each year.

Dr. RAVER. Well, I just want to point this out, that in the table on page 2, which we have been talking about, that as of this date we have carried to accumulated net revenues $83,578,000.

We are using that money to retire the debt, so that you cannot count it as debt retirement and taxes both, but if you do not want to count it as debt retirement you might count it as income tax.

Mr. JENSEN. All right, we will leave that to the professionals. I do not claim to be one of those.

Dr. RAVER. Well, I do not either, Mr. Chairman.

Mr. JENSEN. All right; go ahead with your statement, Doctor.

PRESENT CAPITAL INVESTMENT

DR. RAVER. First of all, perhaps, we should show how much capital we have invested. That is shown on page 9, table 4, and table 3. Let me refer first to table 4 which is a summary of plant accounts as of June 30, 1952.

Mr. JENSEN. Before you proceed let us put the tables on pages 8 and 9 in the record.

(The matter referred to follows:)

Columbia River power system, summary of Federal investment and repayment as of June 30, 1952

	Gross investment	Repayments	Net investment
Investment in expenses of operation, maintenance, etc.:			
From congressional appropriations, direct	$62,221,180		
From congressional appropriations, indirect [1]	2,790,049		
From power sales receipts, continuing fund	176,204		
Total for operation, maintenance, etc.	65,187,433	$65,187,433	
Investment in interest expense [2]	63,652,094	63,652,094	
Total current expense	128,839,527	128,839,527	
Investment in capital costs (plant, working capital, etc.): [3]			
From congressional appropriations, direct	452,827,165		
From congressional appropriations, indirect:			
Allotments from PWA funds	43,200,800		
WPA expenditures	6,674,130		
Other [1]	4,692,691		
Interest on Federal investment [2]	[4] 25,381,854		
From power sales receipts, continuing fund	1,086,400		
Total capital investment of the Federal Government	533,863,040	123,005,866	$410,857,174
Total current expense and capital costs	662,702,567	251,845,393	410,857,174

[1] Goods and services received from, net of amounts furnished to, other Federal agencies without transfer of funds.

[2] The Columbia River power system does not pay interest from its appropriations but imputes interest expense at 2½ percent per year and returns receipts to the Treasury in repayment of such costs.

[3] Consists of utility plant of $515,602,079, cash (including a $500,000 balance in the continuing fund), materials, etc.

[4] Consists of interest during construction, $15,063,195, included as part of cost of plant and $10,318,659 for deferred interest charges on future downstream river regulation.

Columbia River power system, summary of plant accounts as of June 30, 1952

	Total	Allocation	
		Nonpower	Power
Bonneville Power Administration	$249,039,489		$249,039,489
Bonneville Dam project	86,773,504	$27,266,273	59,507,231
Columbia Basin project	445,222,773	238,167,414	207,055,359
Total	781,035,766	265,433,687	[1] 515,602,079
Less combined reserve for depreciation			44,623,044
Total less reserve			470,979,035

[1] The total of plant investment represents the major component of the gross Federal investment of $662,702,568 as shown in schedule 5 of the auditors' report, which includes in addition amounts appropriated for cash working capital, materials and supplies, operating expenses and other similar items and nonappropriated items such as interest on Federal investment.

Mr. JENSEN. Proceed, Doctor.

Dr. RAVER. The total investment as of June 30, 1952, and that is almost a year old now, and that is the date of the last audit, is $249,039,489 for the Bonneville Power Administration; $86,773,504 for the Bonneville Dam project, and $445,222,773 for the Columbia Basin project, making a total of $781,035,766 invested in the three projects, the Bonneville Dam, Grand Coulee Dam, and the related facilities for power in those dams, and the Bonneville Power Administration transmission system.

As shown in the allocation to the right of those figures, of that $781 million, $265,433,687 is allocated to nonpower, either to irrigation or to navigation, so that when I speak there about paying interest and repaying the Federal investment out of power revenues I am speaking about the $515,602,079 which has been allocated to power and not about the $265,433,687 allocated to nonpower.

Mr. OSTRANDER. Dr. Raver, those figures are investments in physical plant, and there is also a small additional investment consisting of miscellaneous assets, cash, inventories, working capital, and so forth, which brings the figure up to $533,863,000 in table 3.

Mr. JENSEN. This refers to material you have on hand?

Mr. OSTRANDER. It is inventories, working capital, and so forth.

Dr. RAVER. Miscellaneous assets, cash, and so forth.

Mr. JENSEN. Go ahead, Doctor.

Dr. RAVER. On that date we had set up a depreciation reserve in the amount of $44,623,044, so our net total in plant investment was $470,979,035 as of June 30, 1952.

Now, table 3 on the previous page, as Mr. Ostrander has pointed out, includes certain other items that are not actually in the physical plant, the details of which are given there.

ADDITIONAL CAPITAL INVESTMENT

Mr. BUDGE. In connection with this capital investment in the Columbia River watershed we note that the Federal Government now has a little over $781 million in it. A couple of weeks back I asked the Secretary's Office to furnish me with a statement of all of the projects on the Columbia River watershed, that is, the Federal projects, those which were under construction, authorized, or recommended by the Bureau of Reclamation and the Corps of Army Engineers. I do not have that exact figure but it is in excess of $4½ billion.

Dr. RAVER. Was that the proposed program?

Mr. BUDGE. That is the program that the Corps of Army Engineers

and the Bureau of Reclamation have at this time recommended, the two agencies.

Dr. RAVER. The recommended program, that is correct.

Mr. BUDGE. Yes.

Dr. RAVER. I think that sounds about like the figure.

Mr. BUDGE. Which, of course, is many times more than the present Federal investment.

Dr. RAVER. That is correct.

Mr. BUDGE. Which again, Mr. Chairman, indicates to me, as I remarked to the Secretary when he appeared before this subcommittee, that Congress is going to have to spell out what the policy of the Federal Government is going to be in respect to further development.

Mr. OSTRANDER. Congressman Budge, may I point out that the figures in table 4 cover just the Columbia Basin project, the Bonneville Dam project, and the Bonneville Power Administration.

Mr. BUDGE. I understand it does not include any of the others which are under construction.

Mr. OSTRANDER. As of this same date, June 30, 1952, there were other projects under construction and the investment in those as of that time was, roughly, $301 million, which would be added to this total of $781 million.

Mr. BUDGE. Those are all included in the figures the Secretary furnished.

Mr. OSTRANDER. All of those would be in that ultimate cost figure that you have mentioned.

Mr. JENSEN. Since you have gone into that, what is the estimated cost of all of the projects in the Columbia River Basin which are now under construction; do you have that figure?

Mr. OSTRANDER. I can supply that figure.

Mr. JENSEN. I wish you would, as then our picture will be quite complete.

(The matter referred to is as follows:)

Columbia River power system, estimated ultimate cost of projects now under construction

Project [1]	Estimate ultimate cost [2]	Remarks
	Millions	
Hungry Horse	$109.7	Partially completed; 2 generators in operation; to be completed in November 1953.
Albeni Falls	32.4	Storage freservoir in operation in winter of 1952–53; generators scheduled for 1954–55.
Chief Joseph	212.5	Scheduled for 1955–59.
McNary	298.8	Scheduled for 1953–56.
The Dalles	377.8	Scheduled for 1957–60.
Chandler	13.5	Principally on irrigation project; scheduled for 1955.
Detroit-Big Cliff	73.6	Scheduled for 1953–54.
Lookout Point-Dexter	102.9	Scheduled for 1954–55.
Total	1,221.2	

[1] Costs include estimated interest during construction except for Chandler.

[2] The list excludes existing projects as follows:

Bonneville Dam: Cost $87.9 million, of which $59.9 allocated to power.

Columbia Basin project: The dam and powerplant are completed but not the irrigation works. Estimated ultimate costs exclusive of interest are—

	Million
Dam, reservoir, etc	$169.5
Power facilites	112.3
Irrigation works	456.6
Total	738.4

Small projects in southern Idaho not now a part of the Columbia River power system.

List excludes Palisades, which is under construction in southern Idaho and is not now a part of the system. Estimated cost is $76.6 million, exclusive of interest.

Dr. RAVER. May I put in one further bit of information for clarity on how this additional investment is being handled. You do not find figures in the table for the new projects under construction as of June 30, 1952, because none of those projects had, as of that date, reached the point where they were producing any power, but the interest during construction on the money invested in those new dams is added to the total investment until such time as those projects come into production and we begin to get revenue.

Mr. BUDGE. That is standard practice followed by the Bureau and the corps.

Dr. RAVER. I want to be sure you understand we follow standard accounting practice and include interest during construction as part of the capital cost until such time as the dams begin to produce some revenue, and then we begin to pull them into this financial picture.

Mr. JENSEN. Does that complete your statement, Doctor, on the financial setup?

CASH RECEIPTS

Dr. RAVER. I have a summarized financial statement that you might like to have in the record. I would just like to put in this one figure. Cash receipts totaling $251,845,393.63 have been returned to the Treasury.

After paying all expenses of operation, maintenance, and marketing, administration, and so forth, a net return of $186,657,960.87 has been made.

This remainder consists of:

Interest paid on money invested by the U. S. Government	$63, 652, 094. 47
Repayment of principal	123, 005, 866. 40

That is the statement as of June 30, 1952.

Mr. JENSEN. Do you have an estimate for 1953?

Dr. RAVER. Yes, sir; I can give you the estimated figures for 1953. I believe Mr. Ostrander can give you those.

Mr. JENSEN. I think it would be well to do that. Since we have gone into the financial status of the Bonneville Power Administration we better have the picture as complete as possible.

Dr. RAVER. I have it right here, and can put it in the record.

Mr. JENSEN. All right; the entire statement will be inserted in the record without objection.

(The matter referred to is as follows:)

COLUMBIA RIVER POWER SYSTEM FINANCIAL HIGHLIGHTS

1. Condensed summary of revenues and expenses

	1951	1952	Total to June 30, 1952
	Millions	*Millions*	*Millions*
Gross revenue	$36. 2	$40. 2	$265. 3
Operation, maintenance, etc.	−8. 7	−9. 5	−72. 1
Depreciation	−6. 5	−7. 2	−44. 8
Interest	−6. 5	−7. 6	−63. 3
Net	14. 5	15. 9	85. 1
Prior years' pension adjustment	0	1. 5	1. 5
Net revenues	14. 5	14. 4	83. 6

2. Revenues, receipts, and repayments

	Total to June 30, 1952
	Millions
Gross revenue	$265.3
Less accounts receivable, noncash exchange sales, etc.	13.5
Cash receipts	251.8
Less operation, maintenance, etc., exclusive of noncash exchange purchases, etc.	65.2
Less interest expense	63.6
Net repaid on capital	123.0

3. Federal capital investment and repayment

	Total to June 30, 1952
	Millions
Plant investment	$515.6
Cash, supplies, etc.	18.2
Gross capital investment	533.8
Repaid (23 percent)	123.0
Unpaid balance	410.8

4. Capital investment and repayment by projects to June 30, 1952

	Gross	Repaid		Net
		Amount	Percent	
	Millions	*Millions*		*Millions*
Bonneville Power Administration	$255.5	$67.5	26.4	$188.0
Bonneville Dam	59.9	18.7	31.2	41.2
Columbia Basin	218.4	36.8	16.8	181.6
Total	533.8	123.0	23	410.8

NOTE.—These payout data are taken from the certified cost accounts. They agree with the payout data for BPA and Bonneville Dam but differ in several respects from the payout figures for the Columbia Basin project. In the case of the Columbia Basin project the preliminary payout data as of June 30, 1952, show repayment of $28,786,000 of principal, plus provisions for replacement in the amount of $6,689,000. In addition, the payout plan has several other differences from the cost accounts, but the net effect of all the differences is such that the final results are not greatly different in either case.

5. Energy sales and average revenue per kilowatt-hour

	1951	1952
Kilowatt-hours sold	15.1 billion	17.0 billion.
Revenue (exclusive of miscellaneous) per kilowatt-hours sold	2.37 mills	2.31 mills.

RETURNS TO THE FEDERAL TREASURY TO JUNE 30, 1952

1. Cash receipts totaling $251,845,393.63 have been returned.

2. After paying all expenses of operation, maintenance, marketing, administration, etc., a net return of $186,657,960.87 has been made. This remainder consists of—

Interest paid on money invested by the U. S. Government	$63,652,094.47
Repayment of principal	123,005,866.40
Total	186,657,960.87

Operating results for 1952, 1953, and 1954 (1952 actual; 1953 and 1954 estimated

[Thousands of dollars]

	1952	1953	1954
Energy sales	$39,526	$37,500	$44,800
Other operating revenue	654	750	900
Total operating revenue	40,180	38,250	45,700
Expenses for operation, maintenance, interest, depreciation, etc.:			
BPA	15,786	19,053	22,051
Bonneville Dam	2,610	2,554	2,565
Columbia Basin project	5,893	7,096	7,576
Albani Falls		425	464
Hungry Horse		2,273	3,285
Detroit-Big Cliff		345	1,529
McNary			4,642
Total expense	24,289	31,746	42,112
Net operating revenue	15,891	6,504	3,588
Prior years' pension adjustment	1,452		
Net after adjustment	14,439		

COMMENTS

1. 1952 data are actual as condensed from the auditors' report.
2. 1953 revenues are estimated on the basis of actual for the first 6 months. The estimate for the last 6 months assumes that actual streamflows as of about February 1 will recede to median month flows for the remainder of the drawdown period.
3. The 1954 revenue estimate is based upon assumed median month water conditions. If minimum year water conditions were to prevail, the estimate would be about $3,200,000 less than the amount shown. On the other hand, exceptionally good water conditions could increase the estimate as shown by about $2,709,000.

Operating results for first half of fiscal years 1952 and 1953

[Thousands of dollars]

	July to December, inclusive	
	Fiscal year 1952	Fiscal year 1953
Energy sales	$19,168	$18,566
Other	232	180
Total operating revenue	19,400	18,746
Operation and maintenance depreciation, interest, etc.[1]	11,347	14,588
Net revenues	8,053	4,158

[1] Amounts by project (estimates for all except BPA):

	July to December, inclusive	
	Fiscal year 1952	Fiscal year 1953
BPA	7,084	8,581
Bonneville Dam	1,410	1,277
Columbia Basin project	2,853	3,547
Albeni Falls		[a] 425
Hungry Horse		758
Total	11,347	14,588

[a] Represents estimated expenses for the entire fiscal year, but the total is charged to the first half of the fiscal year inasmuch as the benefits from the operation of the project were received during the first half of the fiscal year.

Corporate-Type Budget

Mr. Jensen. Now, Doctor, in the House report of this committee last year, we said this:

> The activities of the Bonneville Power Administration are analogous to the type of activity carried on by private utilities. It would seem therefore that such operations should be budgeted along the lines required for corporations under the Government Corporation Control Act, Public Law 248, 79th Congress, 1st session. The committee requests that the Department give consideration to this matter and submit to the Congress at the time the hearings are held on the 1954 budget a proposed program for accomplishing such a change in the budget submission.

Are you in readiness to submit such a recommendation at this time?

Dr. Raver. Yes, sir, Mr. Chairman.

Pursuant to this request, the budget and accounting-staff members of the Department and Bonneville Power Administration have considered more specifically how corporate budget methods would serve management effectiveness and efficiency both internally and from the point of view of executive and legislative control.

From its inception the Bonneville Power Administration has been required to keep its financial records in accordance with the Federal Power Commission system of accounts, which is a business-type accrued accounting system.

In addition, since 1945, when the Bonneville Project Act was amended, an annual business-type audit of its accounts has been required by law. Therefore, it has been possible to prepare pro forma statements conforming to the instruction of the Bureau of the Budget for preparing corporate budgets and to analyze the advantages and disadvantages of this method of presentation.

Now, I have prepared an analysis of that, but I would like to ask our Controller, Mr. Ostrander, to give you the highlights of that analysis because it is somewhat of a detailed statement, and after his summary is given if you still want the detailed statement in the record I will submit it for the record.

Mr. Jensen. I think the detailed statement should be in the record.

(The matter referred to follows:)

Analysis of the Application of the Corporate Budget Act to Bonneville Power Administration Budget Presentation

Introduction

The House Appropriations Committee in its report on the Department of the Interior appropriations bill for fiscal year 1953 requested that the Department give consideration to the application of the Government Corporation Control Act to the Bonneville Power Administration. The committee said:

> "The activities of the Bonneville Power Administration are analogous to the type of activity carried on by private utilities. It would seem therefore that such operations should be budgeted along the lines required for corporations under the Government Corporation Control Act, Public Law 248, 79th Congress, 1st session. The committee requests that the Department give consideration to this matter and submit to the Congress at the time the hearings are held on the 1954 budget a proposed program for accomplishing such a change in the budget submission."

Pursuant to this request, the budget and accounting staff members of the Department and Bonneville Power Administration have considered more specifically how corporate budget methods would serve management effectiveness and efficiency both internally and from the point of view of executive and legis-

lative control. From its inception the Bonneville Power Administration has been required to keep its financial records in accordance with the FPC system of accounts, which is a business-type accrued accounting system. In addition, since 1945, when the Bonneville Project Act was amended, an annual business-type audit of its accounts has been required by law. Therefore, it has been possible to prepare pro forma statements conforming to the instruction of the Bureau of the Budget for preparing corporate budgets and to analyze the advantages and disadvantages of this method of presentation.

The Administration's activities have many of the characteristics found in business organizations. It receives revenues for the sale of power; enters into contracts as a wholesale distributor with retail distribution agencies and companies and with large power consuming industries; installs facilities for the expansion of plant capacity; and has the responsibility for repayment to the Treasury of the Federal Government's investment in power facilities and operating expenses, interest, and other costs incidental to the power operation.

RECOMMENDATIONS

As a result of discussions and analysis of how the Government Corporation Control Act and the Bureau of the Budget instructions pursuant to this act would apply specifically to the Bonneville Power Administration, we submit the following recommendation:

> Legislation should be enacted to make the Government Corporation Control Act applicable to the Bonneville Power Administration and to permit the Administration the use of its receipts subject to the congressional controls provided in that act, for the following purposes: Expenses of operation and maintenance of the Bonneville transmission system and of marketing electric power and energy; payment to the Treasury to the credit of miscellaneous receipts necessary to return with interest the Administration's indebtedness to the Federal Government for capital investment; payments to the miscellaneous receipts and reclamation funds of the Treasury of amounts determined as necessary pursuant to agreements with the Bureau of Reclamation and Corps of Engineers to return costs at the generating projects allocated to power, irrigation, or other nonpower purposes but assigned for repayment out of power receipts; and to offset the requirements of the Administration for acquisition of capital assets. It should also provide that the receipts (to be used as indicated) and any appropriations from the general fund of the Treasury required to meet the Administration's program be placed in one fund to be available until expended.

FORM AND CONTENT OF RECOMMENDED BUDGET STATEMENTS

Bureau of the Budget instructions for Government corporation budget presentations prescribe the basic forms and procedures for developing the required budget statements which are recommended herein for use by the Bonneville Power Administration.

The pro forma schedules attached to this study, which it is recommended the Bonneville Power Administration present, would appear in the budget document of the United States which is published annually with the President's budget message, are as follows:

I. Appropriation language.
II. Budgetary authorization schedules.
  A. Amounts available for obligation.
  B. Analysis of expenditures.
III. Business-type statements.
  A. Statement of source and application of funds.
  B. Statement of income and expense.
  C. Statement of financial condition.
  Schedule A–1. Accrued expenditures by objects.

The major features of the corporate budget presentation by the Bonneville Power Administration are—

1. The income and expense statements show the Administration's total operations in conformance with its business-type responsibilities, which are set forth in the Bonneville Project Act as amended. This act provides that the Administration shall establish rates which will recover the cost of producing and transmitting electric energy, including the amortization of Federal investment in transmission and generating facilities over a reasonable period of years.

2. The net effect of the Administration's activity on the Treasury of the United States is shown.

3. Work accomplishments are shown in terms of services and materials received (in "accrued expenditures") which reflect the Administration's performance on approved programs.

4. Use of funds is shown by the Administration to finance the investment of the Federal Government in transmission facilities, to pay operations and maintenance costs, and repay costs assigned to power at the generating plants.

5. In addition to the corporate budget statements, instructions of the Bureau of the Budget require that the presentation show the requirements for the Administration's program in terms of obligations and objects of expenditures, so as to reflect the commitments made against the United States Treasury pursuant to the appropriations made by Congress. The traditional Government-type of budget presentation, now being used by the Administration, also shows these facts.

THE BUDGET PRESENTATION

Under our recommendation, schedules prescribed by the Bureau of the Budget and given previously would constitute the Administration's official presentation to Congress. The usual introductory material would preface these schedules in the President's budget document, explaining the major features of the administration's program and the salient factors influencing its estimates for the budget year.

The document containing justification of programs and estimates for the fiscal year would be prepared to provide further details supporting the administration's estimates.

It is proposed that the general plan of the document be as follows:

(*A*) *Introduction and general statement.*—This section would outline the administration's role in the power program of the region, point up significant trends affecting its activities, explain the objectives of the program for the budget year, and summarize very briefly past year accomplishments. Note: This would follow the pattern of present detailed justification to Congress.

(*B*) *Schedule of obligations.*—This table would provide a summary of obligations by major items or activities. A 3-year comparison would show the actual for the past year and estimates for the present and budget years. At the bottom of the table obligations would be reconciled to accrued expenditures for purposes of showing performance.

(*C*) *Summary of construction program.*—This table would be prepared to show the facilities proposed for construction and the estimated costs, actual accrued expenditures incurred prior to the present year, estimated during the present year, estimated during the budget year, and balance required to complete the facilities. A reconciliation of accrued expenditures to obligations would be shown at the bottom of the table.

(*D*) *Justification of facilities in the construction program.*—As in the present justification book, this section would give Congress the basis for including the facilities in the administration's program, a summary description of the administration's engineering plans, and the proposed schedule for construction.

(*E*) *Summary of operations and maintenance program, interest payments, payments of costs assigned for repayment out of power revenues at the generating plants, and repayment of the Administration's own cost of capital investment.*—This table would show the major components of the Administration's expenses for these items, actual accrued expenditures for the past year and estimated for the present and budget years. Reconciliation of accrued expenditures to obligations would be shown at the bottom of the table.

(*F*) *Justification of operations and maintenance expenses, interest payments, repayments of costs of generation plants and repayment of the Administration's own cost of capital investment.*—Activities or items falling into these categories would be justified, as in the present justification book, in terms of workload, program objectives and other factors of cost.

(*G*) *Receipts schedule.*—This schedule would present actual receipts for the past year and estimated receipts for the present and budget years, by major classes.

(*H*) *Inventories.*—This statement would explain the Administration's proposed plans in the budget year for increasing or decreasing its inventories.

(*I*) *Administrative and general.*—This schedule would present the Administration's administrative and general costs which are distributed between the operations and maintenance and construction programs. These estimates of joint services such as executive, legal, accounting, and administrative services, would in effect be justified under the major programs to which they are charged but

would be set forth in this schedule to show the expenses on that part of the program which are not directly assignable to specific activities or direct work items. The purpose of this schedule would be to present to Congress a clear statement of the costs of these activities. This statement is not required in the instructions of the Bureau of the Budget. The form of this table will depend upon the current study of activities being conducted by the Administration. When a firm activity budgeting and accounting system has been established, the Administration will be able to propose to the Bureau of the Budget a specific form for this table so that it can be included in the printed budget document.

The above presentation would provide full justifications similar to those now contained in the Administration's presentation to Congress. The operations and maintenance program would be justified by activities, and the construction program would be justified by major facility items. In addition, it would give Congress substantially more information on program accomplishments than is contained in the Administration's present presentation.

Studies are currently under way directed toward developing an improved reporting and activity accounting system applicable particularly to BPA operation and maintenance. These studies indicate it will be possible to improve and expand performance budgeting in the Administration. Work units will be carefully defined, and in turn they will be collected into activities which will be set up so they will describe work performed and so that cost and work standards information can be applied to them. Obligation and expenditure information will be collected into a system of accounts which is developed to report on work categories. When these studies are completed it will be possible to determine whether the Administration's budget should be prepared using these activities as a significant measure of program estimating and performance. As rapidly as these improvements are made, they will be applied in presenting the justification material outlined above.

PROPOSED LEGISLATION

"A BILL, To amend the Bonneville Project Act

"*Be it enacted by the Senate and House of Representatives of the United States in Congress assembled*, That subsection (a) of section 9 of the Act entitled 'An Act to authorize the completion, maintenance, and operation of the Bonneville project for navigation, and for other purposes,' approved August 20, 1937 (50 Stat. 731), as amended, is further amended to read as follows:

"'The Administrator, subject to the requirements of the Federal Power Act, shall keep complete and accurate accounts of operations, including all funds expended and received in connection with the transmission and sale of electric energy for which he is now or may hereafter be designated the marketing agent, and in the maintenance of such accounts, appropriate obligations shall be established for annual and sick leave of absence as earned. The Government Corporation Control Act (59 Stat. 597), as amended, shall be applicable to the Administrator to the same extent as to wholly owned Government corporations. The forms, systems, and procedures prescribed by the Comptroller General for the Administrators' appropriation and fund accounting shall be in accordance with the requirements of the Federal Power Act with respect to the accounts of electric operations of public utilities and the regulations of the Federal Power Commission pursuant thereto.

" 'SEC. 2. Section 11 of said Act, as emended, is further amended by inserting "(a)" before the first sentence of said section, by striking the words "generated at the Bonneville project shall be covered into the Treasury of the United States to the credit of miscellaneous receipts" and inserting in lieu thereof the words "for which the Administrator is now or may hereafter be designated the marketing agent shall be credited to and become a part of the Bonneville Power Administration Fund established in subsection (b) of this section," and by adding the following new subsections at the end of said section:

" ' "(b) There is established in the Treasury of the United States an account to be known as the Bonneville Power Administration Fund. In addition to the receipts paid into this fund pursuant to subsection (a) of this section, there shall be credited to and shall become a part of the said fund: (1) All other receipts of the Administrator; (2) all appropriations made by the Congress for the Administrator; and (3) all moneys which, upon the enactment of this Act, are in the special account in the Treasury established pursuant to Executive Order No. 8526. All of the moneys of the Administrator shall be disbursed and accounted for as one fund.

"'"(c) All moneys in the Bonneville Power Administration Fund shall be held for use, subject to the provisions of the Government Corporation Control Act, for the following purposes: *Provided*, That appropriated moneys shall be used only for the purposes for which such moneys are appropriated:

"'"(1) Expenses of operation and maintenance of the transmission system, including facilities and structures appurtenant thereto, under the jurisdiction of the Administrator, of marketing of electric power and energy, of constructing electric transmission lines and substations, and facilities and structures appurtenant thereto, and of carrying out the duties imposed upon the Administrator pursuant to law.

"'"(2) Payment to the Treasury, to the credit of miscellaneous receipts, of amounts necessary to return with interest the Federal investment in the transmission system under the jurisdiction of the Administrator.

"'"(3) Payment to the Treasury, to the credit of miscellaneous receipts or the Reclamation Fund, as provided by law, of amounts necessary to return costs, assigned for repayment out of power revenues, at the generating plants in the Pacific Northwest for which the Administrator is now or may hereafter be designated the marketing agent, pursuant to agreements with the agencies constructing and operating such generating plants.

"'"(d) The costs assigned for return from revenues derived from the sale of power generated at all Federal projects now or hereafter constructed in the Pacific Northwest, for which the Administrator is now or may hereafter be designated the marketing agent, may be considered as a unit in fixing rates and in meeting payout requirements: *Provided*, That nothing in this subsection shall be construed as modifying in any way the requirements of existing laws with respect to the standards of feasibility applicable to reclamation or other Federal projects, the assignment of obligations for repayment or return of the costs of such projects, the availability of funds for the construction or the operation and maintenance of such projects, or the disposition of any of the moneys received by the United States in connection with such projects.

"'"(e) For the purposes of this section, the words 'Pacific Northwest' mean the area, within the United States, comprising the Columbia River Basin, the basins of other streams entering the Pacific Ocean between the Canadian boundary and the California-Oregon boundary, and the closed drainage areas of Oregon."'"

EXPLANATION OF PROPOSED LEGISLATION

The first sentence of subsection (a) of section 9 of the Bonneville Act, as modified by section 1 of the bill, would extend the requirement to maintain utility accounts pursuant to the Federal Power Act to the transmission and sale of all electric energy for which the administrator is or may be designated the marketing agent. The subsection would make the Government Corporation Control Act, including the presentation of a corporate business-type budget, applicable to the Administrator to the same extent as to wholly owned Government corporations. The present requirement for an independent commercial-type audit would be eliminated, because of the provision in the Government Corporation Control Act for a commercial-type audit by the Comptroller General.

Section 2 of the bill would modify section 11 of the Bonneville Project Act by designating as subsection (a) thereof the present section 11, after providing that all power receipts of the administrator shall be deposited in the Bonneville Power Administration Fund established by the new subsection (b) of section 11. The Continuing Fund will be retained to insure the availability of funds for emergency expenses and insuring continuous operation in situations in which moneys in the Bonneville Power Administration Fund would otherwise not be available.

Subsection (b) of the new section 11 would establish a Bonneville Power Administration fund which would consist of appropriations from the general fund of the Treasury made by the Congress for the Administrator, power receipts in the special account in the Treasury at the time the bill is enacted, all future power receipts, and all other receipts of the Administrator. All of these moneys would be accounted for and disbursed as one fund.

Subsection (c) sets forth the purposes for which moneys in the Bonneville Power Administration fund could be used, subject to the controls provided by the Government Corporation Control Act. Moneys in the fund could be used for (1) expenses of operation, maintenance and construction of the transmission system, marketing of electric power and energy and carrying out the duties imposed upon the Administrator pursuant to law; (2) payment to the Treasury of principal and interest on the Federal investment in the transmission system; and

(3) payment to the Treasury, to the credit of miscellaneous receipts or the reclamation fund, as may be provided by law, of amounts assigned for repayment out of power receipts at the Federal generating plants in the Pacific Northwest, in accordance with agreements between the Administrator and the constructing and operating agencies. To the extent that power receipts would be used for construction, operation, and maintenance of the transmission system and marketing of electric power and energy, such receipts would constitute an offset against the need for appropriations from the general fund for those purposes.

Subsection (a) of section 2 would preserve the continuing fund presently available for use at the Bonneville, McNary, and lower Snake River projects, which may be used to defray emergency expenses and to insure continuous operation of the dams, as well as the transmission system.

Clause (3) contemplates the return of all costs at the generating projects which are assigned for repayment out of power revenues. These costs include not only operation, maintenance, and construction costs, together with interest thereon, which are allocated to power, but also operation, maintenance, and construction costs which are allocated to irrigation or other nonpower purposes but which, under the laws applicable to the particular project, are assigned for repayment out of power revenues.

The purpose of subsection (d) is to clarify existing authority of the Administration with regard to repayment of costs at generating plants. It would remove whatever existing doubts there may be by providing clear statutory authority for taking into account in the aggregate all costs (regardless of the purpose to which they may be allocated) assigned for repayment from power revenues in the determination of the rates at which power and energy must be sold and thereby assure that revenues will be sufficient to repay such costs to the Treasury. This provision would make no change whatever in the financial requirements of any project. The costs assigned for repayment out of power revenues at each project, determined solely by the laws applicable to that project, would be added together, and the lowest possible uniform rate to liquidate the total of these costs could then be established. The receipts realized from the sale of power from all the projects at that uniform rate would be placed in the Bonneville Power Administration fund and utilized for the purposes specified in subsection (c), including the repayment of all costs at each project which are assigned for repayment out of power revenues.

Subsection (e) would define the term "Pacific Northwest" as used in the amended section 11. The term appears only in subsections 2 (c), (3) and 2 (d) of the proposed bill. It thus defines the area in which generating plants for which the Administration is the marketing agent must be located to be eligible for use of the Bonneville Power Administration fund for repayment of costs or for inclusion of costs in the fixing of the rate level.

PROPOSED APPROPRIATION LANGUAGE

"BONNEVILLE POWER ADMINISTRATION

"[Submitted under the Government Corporation Control Act]

"PAYMENT TO BONNEVILLE POWER ADMINISTRATION FUND—

"For the purpose of carrying out the duties imposed upon the Bonneville Power Administrator pursuant to law, including not to exceed $75,000 for services as authorized by section 15 of the Act of August 2, 1946 (5 U. S. C. 55a), at rates not to exceed $100 per diem for individuals; purchase of not to exceed 25 passenger motorvehicles (of which eleven shall be for replacement only); and purchase (not to exceed one) of aircraft, $_____, to remain available until expended.

"During the current fiscal year the Bonneville Power Administration is hereby authorized to make such expenditures, within the limit of funds available to it and in accord with law, and to make such contracts and commitments without regard to fiscal-year limitations as provided by section 104 of the Government Corporation Control Act, as amended, as may be necessary in carrying out its programs as set forth in the budget for fiscal year ——."

ADVANTAGES OF CORPORATE BUDGET PRESENTATION

Several benefits may be obtained from the corporate budget presentation. It would provide Congress, the Bureau of the Budget and the Department of the Interior with a more complete analysis of the operations of the Administration. At present, the annual audit report shows the Administration's financial condition

at the end of the fiscal year and the results of operations for the past year. The comparative financial statements in the corporate budget include the actual results of operations for the past year, together with estimated results for the current and budget years. Therefore, the integration of the corporate statements with the standard presentation in terms of obligations and objects of expenditure and appropriation requirements provides a projection of the accomplishments of the program for which funds are requested.

Secondly, from this type of presentation it would be possible to determine accomplishments in terms of services and materials received and used in carrying out the program. Statements in the budget document would show the use and application of the Administration's resources: revenues, obligating authority (appropriations), inventories and undelivered orders from prior years, as is not now done.

Thirdly, one of the most serious limitations imposed upon those Government agencies which carry on primarily proprietary functions has been the emphasis upon control of activities through obligations and objects of expenditure, rather than by costs and accomplishments. The reports required by the Bureau of the Budget, the General Accounting Office and the Treasury Department emphasize the status of the organization with regard to the commitment of its obligating authority, rather than to the unit costs of work items and accomplishment of programs. Use of corporate budgeting by the Administration will facilitate further improvements in management accounting techniques.

Increased emphasis on costs and management accomplishments, together with the type of reporting required under corporate budgeting, would permit the lifting of costly limitations which have been imposed upon the Administration through the appropriations process. As long as these limitations prevail, detailed coding of obligating documents and separation of activities have been required.

In the Administration's program many members of the staff fulfill an operating and construction function. In some cases the allocation of funds required between the functions is necessarily arbitrary. In other cases there may be choices between assigning crews in the field, for example, to either construction or maintenance work. At present these considerations are determined by the availability of funds, which may dictate when the work must be performed, particularly in the light of the fact that the Administration's O. and M. funds are available on an annual basis, and therefore the funds cannot be carried forward, although the Administration may be forced to carry over work into the next year. Removal of such restrictions would permit the Administration to determine the work program on the basis of relative priorities and cost factors, such as the desirability of performing certain activities in favorable seasons, necessary maintenance, clearing, or construction work.

Flexibility in the use of appropriated funds is necessary to enable management to meet its responsibilities. In an operation such as that of the Administration it is not possible to foresee all the fund requirements 18 months to 2 years in advance of use. Moreover, these requirements are not always entirely under the Administration's control, since it serves more than 100 customers at over 200 different points of delivery. These customers, in turn, have changing load and service requirements which cannot be foreseen. As a result, the Administration may be required to make modifications on rather short notice in its facilities for serving its customers. Any business enterprise must budget its resources and exercise diligent control over its budget, but it must have a considerable degree of flexibility to revise and adjust its budget from month to month if necessary to meet new situations. This flexibility can be accomplished through the appropriation language proposed above.

APPENDIX

PROPOSED LEGISLATION

A BILL To amend the Bonneville Project Act

Be it enacted by the Senate and House of Representatives of the United States in Congress assembled, That subsection (a) of section 9 of the Act entitled "An Act to authorize the completion, maintenance, and operation of the Bonneville project for navigation, and for other purposes," approved August 20, 1937 (50 Stat. 731), as amended, is further amended to read as follows:

"The Administrator, subject to the requirements of the Federal Power Act, shall keep complete and accurate accounts of operations, including all funds expended and received in connection with the transmission and sale of electric energy

[generated at the Bonneville project] *for which he is now or may hereafter be designated the marketing agent,* and in the maintenance of such accounts, appropriate obligations shall be established for annual and sick leave of absence as earned. [The Administrator shall, after the close of each fiscal year, obtain an independent commercial-type audit of such accounts.] *The Government Corporation Control Act (59 Stat. 597), as amended, shall be applicable to the Administrator to the same extent as to wholly owned Government corporations.* The forms, systems and procedures prescribed by the Comptroller General for the Administrator's appropriation and fund accounting shall be in accordance with the requirements of the Federal [Water] Power Act with respect to the accounts of electric operations of public utilities and the regulations of the Federal Power Commission pursuant thereto."

SEC. 2. Section 11 of said Act, as amended, is further amended by inserting "(a)" before the first sentence of said section, by striking the words "generated at the Bonneville project shall be covered into the Treasury of the United States to the credit of miscellaneous receipts" and inserting in lieu thereof the words "for which the Administrator is now or may hereafter be designated the marketing agent shall be credited to and become a part of the Bonneville Power Administration fund established in subsection (b) of this section," and by adding the following new subsections at the end of said section:

"(b)" *There is established in the Treasury of the United States an account to be known as the Bonneville Power Administration fund. In addition to the receipts paid into this fund pursuant to subsection (a) of this section, there shall be credit to and shall become a part of the said fund (1) all other receipts of the Administrator, (2) all appropriations made by the Congress for the Administrator, and (3) all moneys which, upon the enactment of this Act, are in the special account in the Treasury established pursuant to Executive Order No. 8526. All of the moneys of the Administrator shall be disbursed and accounted for as one fund."*

"(c) All moneys in the Bonneville Power Administration fund shall be held for use, subject to the provisions of the Government Corporation Control Act, for the following purposes: Provided, That appropriated moneys shall be used only for the purposes for which such moneys are appropriated:

"(1) Expenses of operation and maintenance of the transmission system, including facilities and structures appurtenant thereto, under the jurisdiction of the Administrator, of marketing of electric power and energy, of constructing electric-transmission lines and substations, and facilities and structures appurtenant thereto, and of carrying out the duties imposed upon the Administrator pursuant to law.

"(2) Payment to the Treasury, to the credit of miscellaneous receipts, of amounts necessary to return with interest the Federal investment in the transmission system under the jurisdiction of the Administrator.

"(3) Payment to the Treasury, to the credit of miscellaneous receipts or the reclamation fund, as provided by law, of amounts necessary to return costs, assigned for repayment out of power revenues, at the generating plants in the Pacific Northwest for which the Administrator is now or may hereafter be designated the marketing agent, pursuant to agreements with the agencies constructing and operating such generating plants.

"(d) The costs assigned for return from revenues derived from the sale of power generated at all Federal projects now or hereafter constructed in the Pacific Northwest, for which the Administrator is now or may hereafter be designated the marketing agent, may be considered as a unit in fixing rates and in meeting payout requirements: Provided, That nothing in this subsection shall be construed as modifying in any way the requirements of existing laws with respect to the standards of feasibility applicable to reclamation or other Federal projects, the assignment of obligations for repayment or return of the costs of such projects, the availability of funds for the construction or the operation and maintenance of such projects, or the disposition of any of the moneys received by the United States in connection with such projects.

"(e) For the purposes of this section, the words 'Pacific Northwest' mean the area, within the United States, comprising the Columbia River Basin, the basins of other streams entering the Pacific Ocean between the Canadian boundary and the California-Oregon boundary, and the closed drainage areas of Oregon."

Mr. JENSEN. All right, Mr. Ostrander.

Mr. OSTRANDER. As Dr. Raver has pointed out, pursuant to your request last year we have prepared a plan which has been approved by the Department.

We have also reviewed it with the experts at the Bureau of the Budget and have incorporated their suggestions.

I believe our operation meets the criteria that the Bureau of the Budget has fixed for a corporate form of organization in that we are engaged in a business-type of program, dealing with the public, making business transactions with the public, so to speak.

Also, it is a revenue producing program that can be self-sustaining from revenues as regards expenses of operation and maintenance, and be self-liquidating from the revenues as regards the capital investment.

Also because of the business-type and nature of our operation in dealing with a large number of consumers, whose requirements change almost from week to week, we require the flexibility of a business-type operation to meet the consumers' requirements, and that would be provided by the business-type of budget program.

Business-type statements will give Congress a good deal more information than the conventional budget presentation which is only in terms of obligations. Obligations merely represent orders placed or contracts entered into, but do not indicate progress or accomplishments. Business-type statements have been made available to the committee, have they not, Mr. Larson.

Mr. LARSON. Yes, detailed pro forma statements.

Mr. OSTRANDER. They are rather detailed, but I can describe them rather briefly to you.

One is a statement of source and application of funds which shows how much went into plant investment, the actual amount that particular year and it shows the actual costs of operation. It also shows any changes in working capital, and it shows how much money is paid back on the investment.

Then it shows the source of those funds, how much came from business activity itself, and how much came from appropriations, and you finally get down to the net effect on the Treasury.

In addition to that statement of source and application of funds there will be a statement of revenues and expenses which will show you what the gross sales were during a period, what the revenues were, what the expenses were, and how much was left over above expenses. Then, of course, there will be a statement of accrured expenditures.

Mr. JENSEN. What?

Mr. OSTRANDER. A statement of accrued expenditures.

Mr. JENSEN. Acrued expenditures, yes.

Mr. OSTRANDER. This is the term that the Bureau of the Budget uses to indicate goods and services actually received, regardless of when they are used. You might actually receive in a given fiscal year a substantial order of steel. You might not use that in any construction until next year, but by having that sort of information you will know how much goods and services were actually delivered to the project. Then the next year's cost statement shows how much was actually used.

So, you get a very full picture of the operations, and there are supporting schedules, such as details of the change in working capital. In other words, these business-type budget statements give you the accomplishments and costs rather than just the orders placed which is really what obligations are.

The program will be presented to Congress and justified both as regards the operation and maintenance program and the construction program in the same way that it is now. There will be a detailed presentation. So, it does not change that part of the budget presentation at all.

In addition to that, of course, there will be a full accounting for receipts received by the enterprise during each fiscal year and the disposition of those receipts.

PROPOSED LEGISLATION

Now, as part of this plan which has been submitted, and which I believe you have just asked be put in the record, there is a proposed bill to accomplish the placing of the Bonneville Power Administration under the business-type budget. I can give you the highlights of that proposed bill.

The first change in the Bonneville Project Act would be to extend to all of our operation the requirement that we keep accounts in accordance with the Federal Power Commission system of accounts.

The law as it reads now says that we shall keep accounts in that manner as regards the transmission and sale of energy generated at the Bonneville Dam project.

That, obiously, is a little behind the times because we are marketing energy from other projects and will, over the years, market it from a number of others. So, this act would merely extend that to our entire operation.

In addition, the bill would amend our act in such a way that the General Accounting Office would make an annual business-type audit of our accounts and would no longer permit the audit to be made by a private accounting firm.

The next section of the proposed bill sets up a Bonneville Power Administration fund in the Treasury into which all of our receipts and all of our appropriations would be placed; it would be a one-fund operation.

That would simplify accounting somewhat. At the present time there are a number of funds that we have to deal with. It does not present a great problem, but this would put everything in one fund, and everything would be disbursed from that fund.

The act sets out what the fund can be used for and it contains the safeguard that appropriated moneys may be used only for the purpose for which they are appropriated.

Moreover, under the annual appropriation language which would accompany this, in accordance with the Government Corporation Control Act, the entire operation and use of funds would be in accordance with the budget presentation.

The moneys in the Bonneville Power Administration fund that would be established by this bill are to be used for the expenses of operation and maintenance of the transmission facilities and any facilities appurtenant to the transmission system, for the construction of facilities, for repayments to the Treasury of the amounts necessary to return with interest the Federal investment in the transmission system and for payments to the Treasury either to miscellaneous receipts or to the reclamation fund of the amounts required to repay the costs of the generating projects assigned for repayment from

power revenues, including any irrigation costs to be repaid from power revenues.

Another section of the proposed bill would require that in fixing rates for power we take into account in the aggregate all of the costs of the dams assigned for repayment from power revenues.

That would be all of the costs allocated to power itself, and any costs allocated to nonpower purposes, such as irrigation, that must be returned from power revenues.

This language would remove any doubts that may now exist about our ability to take all of these costs into account in the grand total that must be paid from power revenues.

That would give us a basis for determining our required rate levels. We would simply add up all of the obligations to be paid from power revenues. We must see that our rates are high enough from the total system operation to produce the revenues required to meet those aggregate costs.

The proposed bill contains a definition of the term, "Pacific Northwest."

The purpose of defining it is to limit the area in which generating projects must be located before they can be taken into account in this aggregate determination of costs and pay-out requirements and have their power costs paid from the fund.

If by any chance we were assigned the marketing responsibility for a project outside of that area, as so defined, it would have to be done under, I believe, legislation that would let us either bring that into this picture, or we would have to make a special provision for segregating revenues from that particular project.

Those are the highlights of the bill.

The statement which you have placed in the record contains a more detailed explanation of the terms of the bill which has been prepared by the legal staff and, perhaps, is, therefore, a little better than I have been able to give it to you in this brief statement.

Financial statements have been prepared to illustrate the application of this plan to 1952, 1953, and 1954. I will be glad to go over those if you wish. They are in considerable detail, or I can go over them with your clerk if he wishes to spend some time on them. However, they are the type of statements I have described.

Mr. JENSEN. I do not think that is necessary. You have given us a very good idea of exactly what this change in accounting for the Bonneville Power Administration will do, and what it means, and I am sure that it is going to be good from every standpoint.

I am sure it is going to be much easier for this committee to understand exactly what the financial status and operating status of the Bonneville Power Administration is than we have been able to do up to this time. After all, we folks on this side of the table are businessmen; we come from the business world, and we are used to dealing in matters of this nature from a business standpoint. You are now getting down to that system, and I am very happy about that.

Mr. Kirwan, a member of this committee, was chairman of the committee last year when this recommendation was made; so he deserves considerable credit in making the recommendation that this accounting system be changed and revised. I will ask Mr. Kirwan if he has any remarks he would like to make.

Mr. KIRWAN. Not at this point. After you get through with your regular questions, I have some questions.

PRESENT AUTHORITY NOT ALTERED

Mr. JENSEN. Does this proposed change in any way alter your present authority?

Mr. OSTRANDER. No, sir. It is my understanding it does not, except I believe it would in that these receipts would go into this fund and be used in our operation. The net effect, of course, would be to reduce the amount of the appropriations required from the Congress. But there is no expansion of any kind of the basic authority as to the scope of our operations.

Mr. JENSEN. Governor Aandahl, do you have any statement you would like to make in connection with this?

Mr. AANDAHL. Not at this time.

BUDGET REVISION

REDUCTIONS IN CONSTRUCTION AND OPERATION AND MAINTENANCE

Mr. JENSEN. Before we get down to asking questions about the budget as it is presented to the committee, Dr. Raver, do you have the detailed recommendations which have been made by the Interior Department so far as revisions in the original budget estimate are concerned?

Dr. RAVER. Yes, sir.

Mr. JENSEN. I think you might as well put them in the record at this point.

Dr. RAVER. As I indicated in my opening statement, as a result of the analyses that were made in response to a request of the Department and the Bureau of the Budget, we are reducing our appropriation request by $4,571,000 for construction and $200,000 in operation and maintenance, and these are figures which have been cleared with the Department.

Mr. JENSEN. Is that $4 million reduction in construction an overall reduction, or is it specific?

Dr. RAVER. It is specific.

Mr. JENSEN. As to what particular items?

Dr. RAVER. I have a list of the items; if you would like to have them, we can put them in the record.

Mr. JENSEN. Suppose you run over them briefly right now.

Dr. RAVER. Perhaps it would be convenient to refer to them by the item numbers. In other words, we have filed with you a budget presentation, and these item numbers will indicate where the items may be found.

MICROWAVE EQUIPMENT

Budget Item No. 118, McNary-Ross transmission facility, a reduction of $230,000. It will be possible to defer a 24-channel microwave system in this installation. The most essential aspects of the system's operations will be preserved with the presently approved microwave channels.

Mr. JENSEN. What is this microwave equipment going to cost, and just what does it do, in a few words?

Dr. RAVER. Microwave is the latest development in communications, using the ultra high frequency principle. That is basically what it is. It was developed during World War II.

Mr. JENSEN. And it requires new machinery?

Dr. RAVER. Yes. It is a completely new development in the communication system.

Mr. JENSEN. And how much is this going to cost in this budget?

Dr. RAVER. In this particular budget?

Mr. JENSEN. Yes. And then explain the thing.

Dr. RAVER. I can say this in summary, that in the opinion of our engineers it would have been almost impossible for us to have developed a high voltage, high capacity, integrated transmission grid system of the scope and size of the one we are now operating and contemplate with the new generation coming in if we had not had coming along about when it did a new technological development in communication, because the operation of a system of this size becomes so complex that the ordinary communication channels are not adequate to the needs and the kind of continuity of service that is necessary in handling such tremendous loads quickly.

We have in our system basically three types of communication. One is the telephone, which we lease from the telephone company. Two is the so-called carrier system under which very high frequency radio type communication is carried along on the wires of the transmission system. It is called a carrier current which has a higher frequency than the power circuit and can be channeled along the wires of the transmission system to our substations and to the substation operators all over the system.

The carrier system has its limitations, and rather early we discovered—we discovered, as a matter of fact, during World War II—that the carrier system was not going to be adequate to handle the operation of our system. Because there is a limited number of channels of communication that can be made available on the carrier, this type of facility is inadequate for our power system needs. Furthermore, if you have a break in your transmission line, your carrier communication system may go out of service right at the time when you need it most.

So our engineers began studying the possibilities of this microwave development even during World War II. That has been an evolution of a number of years. And they worked with the manufacturers of this equipment after the war to begin the development of a third basic communication facility which has much greater reliability, much greater speed, and many more possible channels in voice communication, just as you find in the coaxial cable. Many conversations can be carried on on that cable at the same time. We have the same kind of a facility here.

Microwave has many other uses besides just voice communication, which is important, of course. The dispatchers on our system can lift the telephone and talk to whomever they wish to talk to immediately over this system. Conversations can go back and forth between them and other dispatchers. If there are difficulties at other parts of the system, they can be located before excessive damage is done.

Mr. JENSEN. How far distant?

Dr. RAVER. This communication system will cover the entire part of our transmission grid by air. It operates on the same basic principle as television by air.

Mr. JENSEN. Have you already started the system?

Dr. RAVER. It is being completed, except for the installation on the part of the system where it is still not too important.

Mr. JENSEN. Did the Congress specifically appropriate money for that?

Dr. RAVER. That has already been appropriated as part of our regular transmission line appropriation since we started.

Mr. JENSEN. This committee has never specifically appropriated any money for this microwave system; have we?

Dr. RAVER. I think so.

Mr. JENSEN. As such?

Dr. RAVER. Yes. I am quite sure you have. It has been discussed in the past.

Mr. JENSEN. I do not ever remember of hearing it discussed before this committee.

Mr. KIRWAN. I have.

Dr. RAVER. It is a very important new technological development in our transmission system.

Mr. JENSEN. I missed it, then, because this was a new item as far as I was concerned.

Mr. FENTON. What is your revised estimate?

Dr. RAVER. On this one segment of the transmission line, a reduction of $230,000 in item 118.

Mr. BUDGE. The justification for item 118 does not even mention anything about microwave. How does that come into it?

Dr. RAVER. I think you will find the justification on microwave is separate in the appropriation.

Mr. BUDGE. Reading your justification on BP–21, the committee would have to assume that is all for direct transmission facilities. Your microwave communication facilities are not even mentioned—this $230,000 or anything else.

Dr. RAVER. If you say it is true, I assume it is, but we have it in there someplace. It may not be on that item. It has just been pointed out to me. You will find it in the last paragraph of that section.

Mr. JENSEN. What will be the total cost of this microwave system when completely installed?

Dr. RAVER. I do not have the final figures. We have some estimated figures of around $8 million for the completed system.

Mr. JENSEN. This duplicates your present system of communication; does it not?

Dr. RAVER. It is an implementation of that. It is more than a communication system. That is only one of its primary functions; but, in addition to that, it is used for operating relays in our substations and serving other important functions. It is more than a communication system. That is one of its main functions, however.

Mr. JENSEN. It assists in the operation of all of those instruments that we see in your operating rooms?

Dr. RAVER. That is right. And it will give us on those dials a continuous reading, which we have never had before, not only of the generating capacity that is in operation at each of the dams but the flow of the streams, the amount of water that is available, because the stream gaging is tied into it on the rivers, the voltage at various points on the system, to keep the dispatcher informed on voltage conditions. That data is continuously being given to him from key points on the system. It has a tremendous advantage in being able to operate efficiently and quickly the entire grid at all stations.

And not only that, but we are tied in with all of the other utilities in the Northwest; so that, from the dispatching point of view, it is of great assistance in the efficiency of their operations as well as ours to get the maximum utilization of the water in the reservoirs and in the streams and in their generating capacity. And, of course, it is a vital thing to us on any part of our system to have instantaneous communication to learn just what happens and to see that the switches are closed or opened in the proper places immediately, to prevent damage and things of that kind.

Mr. JENSEN. What is the relative cost of operation of this system compared to the old system?

Dr. RAVER. The cost of operation has not been shaken down very much yet. The costs of operation are high on this today—we know it—because it is new and we are experimenting with it and reducing the cost of opreation. For example, in starting the operation of this kind of system, we have had to go by the operating standards given to us by the manufacturers of this equipment, as to how frequently it should be inspected and maintained, and we have found those standards are too high. We do not have to send a man around to these stations as frequently as the manufacturers set as the standard, but it was the only standard we had to begin with. We found those costs running higher than we had estimated, and we have been making very close studies of that and reducing those costs. For example, we found that an inspection of those microwave stations once a week, as the standard set by the manufacturers, has been reduced to once every 2 weeks, and we think we can reduce it to once every 4 weeks before we get through. But we have to move into it rather cautiously, because it is new equipment.

Mr. JENSEN. Is it not a fact that we can expect improvements to be made in this microwave system?

Dr. RAVER. Very likely.

Mr. JENSEN. And would it not be good business not to spend too much money in a hurry in view of the fact that it is new and we can expect improvements in the system?

Dr. RAVER. That is true. But we are setting up every year depreciation reserves on this equipment because of that very matter. In other words, we are writing it off much more rapidly than I think we will have to, in anticipation that there will be replacements more frequently than after the system is finally shaken down.

Mr. JENSEN. Are you installing this microwave system in certain sections of the grid system?

Dr. RAVER. Yes, sir; in the main sections.

Mr. JENSEN. Then, as time goes on, you propose to extend that to the complete grid system?

Dr. RAVER. I think we have it finally laid out now. We can show you on a map what the final plan is and how much of it remains to be completed and how much is completed already. Part of it in this program here is for construction money. The equipment has been purchased under last year's appropriation and is being delivered.

On the question as to whether or not it is economically good business to do it, I want to point out that one of the elements in this development that influenced me in recommending it is that we can get more generating capacity out of the generators and more capacity out of the transmission lines because of the greater control that our

dispatchers have over the whole system. That will increase the amount of firm power that we can actually deliver over this system safely. It is also reducing our costs on some of these big switches where the operation of the system with the microwave system makes it possible for us to count on shorter outages and, therefore, greater ability to deliver more firm power to our customers over this system than otherwise we would have been able to do. That means more revenue. That was one of the basic considerations I had when it was first taken up.

PRIVATE UTILITY MICROWAVE INSTALLATIONS

Mr. JENSEN. Now, you have the Northwest powerpool.

Dr. RAVER. That is right.

Mr. JENSEN. Are not private utilities expending any of their own money on this microwave system in cooperation with the Bonneville Power Administration?

Mr. SCHULTZ. Yes. The Pacific Power & Light Co. have put a microwave system in service in connection with the operation of their Yale Dam.

Mr. JENSEN. Is that the only instance?

Mr. SCHULTZ. That is the only direct instance.

Mr. JENSEN. All over your integrated system in the Bonneville area, whether it be the Bonneville Power Administration or private utilities, will they obtain any profit from this microwave system?

Dr. RAVER. I will have to ask Mr. Schultz that.

Mr. SCHULTZ. They will benefit indirectly by reason of the fact that we can pool information and get it together and they can use the information that we get. But we must have that information, the dispatching information which Dr. Raver spoke of, for the operation of our own grid, and we must install that system to take care of the additions that are coming on the system.

TOTAL COST OF MICROWAVE SYSTEM

Mr. FENTON. What is the total cost of that?

Dr. RAVER. Around $8 million.

Mr. FENTON. And it is almost completed, you say?

Dr. RAVER. We still have some to install, but the equipment has already been purchased; so it is almost completed except for those sections over in Montana which we are delaying.

Now do you want me to continue on this list, Mr. Chairman?

Mr. JENSEN. Yes.

Dr. RAVER. The first item I indicated in this proposed reduction involves an item of the microwave.

ADDITIONAL BUDGET REVISION

Budget item No. 119, southeast Portland area service, has been reduced $557,000. Recent engineering studies indicate that loads in the Portland area can be handled by elimination of part of the facilities originally proposed for the new Eagle Creek substation. A portion of the facilities will be moved to the existing Oregon City substation, and it will be possible to eliminate from the program several major items of equipment, such as circuit breakers. On those items,

we have area maps showing just what these items are. If you want to visualize them from those maps, we can discuss it in that way.

We have these maps broken down by the areas. Our operation is broken down into 4 areas and managed by 4 area managers, and each one of those on the maps indicates our transmission facilities in the area. The reduction we just spoke about is in the southwest area of our system, right around Portland.

We are developing a 230,000-volt loop around the Portland area for the basic feed-in supply. The primary customers are the Pacific Power & Light Co. and the Portland General Electric Co., who are distributors in this whole region.

This power all comes from the Columbia River Bonneville Dam, the McNary Dam, and of course, The Dalles Dam when it is completed. At the present time a great deal of it is coming from Grand Coulee Dam. But as the Columbia River system is completed with these new dams, most of the power will flow into this Portland area directly from the east. And we are developing our system to give service in this high-load center area of high voltage.

The original plan for the substation at Eagle Creek was to bring a 300,000-volt line from McNary Dam into here [indicating], reduce it to 230,000 volts and loop back into the 230,000-volt system in our substations. That plan has been changed. We have eliminated this 230-kilovolt loop completely and plan to carry a 300-kilovolt line right on past Eagle Creek and over to the Bethany substation and handle the transformer in there. That change in plan has resulted in a saving of $557,000 in cost.

I think all of this you will find was the result of engineering studies in changing plans to reduce costs.

TRANSFORMER CAPACITY IN AREA SOUTH OF PORTLAND

Mr. JENSEN. A very able engineer who is employed by the House Appropriations Committee to look into matters of this nature has asked this question: "Is there not an excessive amount of transformer capacity going into the area south of Portland? Might it not be much cheaper to originally install smaller banks and later replace them with larger banks when the load develops? Installations of capacity in excess of 1,750,000 kilowatts for this area, when the total load is even less than 200,000, appears to be extremely excessive."

So far as I am concerned, I realize that question is an engineering technicality, but how would you answer it, Dr. Raver?

Dr. RAVER. I am going to ask our chief engineer to answer it, because that is an engineering question. But I want to make this observation. One of the reasons why we have been able to hold our $17.50 wholesale power rate through this period of rising costs has been because we have been taking advantage of the economies of size. We can buy a 250,000-kilovolt-ampere transformer for about half the price per kilovolt-ampere that we can buy a 75,000-kilovolt-ampere transformer, and it costs just about as much to install the one as the other. So that if you are looking into the future, even for the short-range, you can afford to put in the higher capacity transformer and you will make more money out of it than to put in the smaller one.

That is a general observation. That has nothing to do with whether or not specifically we are putting in too much capacity in this one

location. But, as a matter of fact, the same principle is being applied to our whole transmission system. The reason we are going to 300,000 volts and in one case which I will bring up a little later to 345,000—the highest voltage used in any part of this country—is because the cost of the increased size of cable is more than offset by the amount of power you can carry over that line. And we are actually reducing the cost per kilowatt-hour of transmission on our system during this period of rising costs by these engineering studies.

And with all due respect to this engineer—I do not know whether he has analyzed the matter from the economic point of view, which happens to be one of the things I have to do in these situations—we are very definitely moving toward the bigger units, even though you do not load them up immediately.

But you look at the forecast of your business for the particular area and relate that to the increased cost as compared with putting a small unit in and then putting another small unit in later, each one of those units being a higher cost per unit facility than the big one you are putting in. So as to the question of whether that is too much or not, I will have to refer that to our engineer.

Mr. JENSEN. Mr. Schultz, do you want to add anything to what Dr. Raver has said?

Mr. SCHULTZ. I would like to add a few words if I may.

I believe you understand our studies are based on an analysis of the system, using a miniature system of our own that is set up on the calculating board. We have a board on which we can simulate the transmission lines, transformers, generators, and all of the system's facilities. We group them together and then make a very careful study of how we can take care of the needs of the system year after year as new generation comes on and load grows, using a minimum of facilities for the purpose. Our studies have shown that every transformer bank that we put in is definitely needed. If we can be shown how we can save some of those transformers, we would certainly be glad to follow the advice, because it is our desire to keep costs to a minimum.

One point I think is of importance. The figures that were given in connection with transformer capacity may be somewhat misleading due to the fact that we use transformer capacity to save transmission capacity. In other words, there are quite a number of cases where we have put in extra transformer capacity to save building a transmission line. For example, we have a line designed for eventual operation of 345,000 volts. That is a new high voltage—the highest voltage that will be used in the country. Operating at 345,000 volts, we can get three times as much capacity over that line as we can over the conventional transmission line that is built. As most of the money goes in the transmission line, naturally that is where the saving arises. To cut our initial investment down on that circuit, we would start operating at 230,000 volts and we would operate at that to the point where we must increase the voltage, and then we would increase the voltage simply by adding transformers in the line itself.

In adding those transformers, we do provide what may be considered surplus transformer capacity, but we do save on transmission and we also save on circuit breakers and other facilities on the basis that the total overall cost is the minimum.

I believe we can show that every transformer we are recommending is definitely needed in the program. The board study shows it.

Mr. JENSEN. Now, you are installing transformer capacity for future loads. When do you expect, according to your estimates, that the full capacity of these transformers you are installing in the vicinity of Portland will be utilized? Will it be in 1954, 1955, 1956, or 1960?

Mr. SCHULTZ. These transformers that are being requested now are supposed to go into initial service in January 1957.

Mr. JENSEN. 1957?

Mr. SCHULTZ. That is right—the ones we are asking in the 1954 budget.

Mr. JENSEN. Then when do you expect the full capacity of those transformers to be utilized, according to your estimated power load?

Mr. SCHULTZ. They will be utilized to their economic capacity as soon as they are put in service.

Mr. JENSEN. To their economic capacity?

Mr. SCHULTZ. That is right.

Mr. JENSEN. What do you mean by "economic capacity"?

Mr. SCHULTZ. I mean to the point where the carrying charges per kilowatt hour are a minimum. You can take a curve and plot the cost per kilowatt of transformer capacity based on the load, and you will find the most economical point of operation is roughly from about 50 percent up to 115 percent of its capacity. And every one of those transformers will be substantially at its most economical operating point when it is put in service.

Mr. JENSEN. When will the full capacity be utilized?

Mr. SCHULTZ. From the standpoint of service, it will be used almost immediately. When I say "from the standpoint of service," I would like to make that point clear. If we should lose a given facility, like a transmission line or something, the remaining transformers will be loaded to their full capacity almost the day they are put in service. In other words, to provide the capacity that is necessary to deliver power to the area, I can say generally that every one of these transformers is needed to its full capacity.

SYSTEM PLANNING FOR FUTURE CAPACITY

Dr. RAVER. May I indicate to you what we are doing in this engineering development in changing the voltage and why these large transformers fit into that plan and just what has been done?

I can illustrate what has happened simply by showing you the program of transmission lines to take care of these dams that I talked about at the beginning and the new capacity coming in from those dams, on the basis of our old 230,000-volt transmission-line program. You can see the lines coming in from McNary Dam and The Dalles in the Portland areas. Without counting them, you can see there is quite a bundle of transmission lines to get that power into the Portland area. You can see there is a big bundle of transmission lines going from the new Chief Joseph Dam over into the Seattle area.

Now, here [indicating] is the program as it is laid out today for 300,000-volt transmission and 345,000-volt transmission which, as Mr. Schultz has indicated, increases the carrying capacity of a line from 2 to 3 times over the 230,000-volt system. We have reduced the number of lines from Chief Joseph Dam into Snohomish by two.

Mr. JENSEN. What is the kilowatt power?

Dr. RAVER. Those two lines will carry about 1,200,000 kilowatts of power on two transmission lines as compared with about 400,000 kilowatts of power on two 230,000-volt transmission lines. We have reduced the number of lines coming from McNary and The Dalles into this whole Portland area, as shown here, by increasing this voltage and cutting out three from McNary.

Mr. SCHULTZ. They are not quite comparable for The Dalles, because the development here does not show the total lines.

Dr. RAVER. We have cut out at least 5 or 6 transmission lines in this program we have been talking about here, which is a tremendous saving in right-of-way and construction costs over what we would have had to do under the plan as originally laid out. Now, part of our ability to do these things is the microwave system. I want to make clear there are some new technological developments in this field that we are taking advantage of that are definitely reducing our overall costs. So our transmission cost per kilowatt-hour is lower, despite all these rising costs today, than it was 10 years ago and will continue to decrease. But the whole plan, of course, is predicated on carrying the additional amounts of power that are coming in on these programs. It is still part of the full-time, overall program.

CONSTRUCTION

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$47,031,000	$62,427,000	$55,200,000
Prior year balance available	2,303,806	47b,748	
Reimbursements from non-Federal sources	76,290	118,000	161,000
Reimbursements from other accounts	96,712	50,000	50,000
Total available for obligations	49,507,808	63,070,748	55,411,000
Balance available in subsequent year	−475,748		
Obligations incurred	49,032,060	63,070,748	55,411,000

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
1. Construction in progress	$43,843,206	$41,672,748	$38,982,000
2. New construction	3,953,502	19,000,000	14,218,000
3. General plant	1,138,640	2,348,000	2,161,000
Total direct obligations	48,935,348	63,020,748	55,361,000
Obligations Payable Out of Reimbursements From Other Accounts			
1. Construction in progress	96,712	50,000	50,000
Obligations incurred	49,032,060	63,070,748	55,411,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions	2,263	2,265	2,217
Full-time equivalent of all other positions	254	240	215
Average number of all employees	2,282	2,402	2,339
Average salaries and grades:			
General schedule grades:			
Average salary	$4,529	$4,801	$4,873
Average grade	GS–6.8	GS–7.4	GS–7.5
Crafts, protective, and custodial grades:			
Average salary	$3,054	$3,192	$3,233
Average grade	CPC–4.4	CPC–4.5	CPC–4.5
Ungraded positions: Average salary	$4,725	$4,821	$4,833
Personal service obligations:			
Permanent positions	$8,864,296	$10,082,141	$10,172,263
Part-time and temporary positions	1,027,153	1,071,527	991,583
Regular pay in excess of 52-week base	23,406	25,000	25,000
Payment above basic rates	510,626	410,574	380,381
Excess of annual leave earned over leave taken	365,207	81,000	55,000
Total personal service obligations	10,790,688	11,670,242	11,624,227
Direct Obligations			
01 Personal services	10,761,297	11,655,242	11,609,227
02 Travel	1,751,955	1,729,100	1,619,197
03 Transportation of things	322,010	528,300	492,000
04 Communication services	103,469	108,600	112,100
05 Rents and utility services	83,009	111,700	109,400
06 Printing and reproduction	10,520	17,200	16,900
07 Other contractual services	158,192	296,400	346,100
08 Supplies and materials	13,120,306	18,664,111	15,102,971
09 Equipment	7,007,803	15,638,745	12,139,045
10 Lands and structures	15,865,984	14,660,000	14,227,110
11 Grants, subsidies, and contributions	67,658	95,900	96,500
13 Refunds, awards, and indemnities	3,067	1,250	1,250
Subtotal	49,255,270	63,506,548	55,871,800
Less services performed for—			
Operation and maintenance	306,734	478,800	503,800
Other accounts	13,188	7,000	7,000
Net direct obligations	48,935,348	63,020,748	55,361,000
Obligations Payable Out of Reimbursements From Other Accounts			
01 Personal services	29,391	15,000	15,000
02 Travel	20,269	10,000	10,000
05 Rents and utility services	3,378	2,000	2,000
07 Other contractual services: Services performed by other accounts	13,188	7,000	7,000
08 Supplies and materials	30,486	16,000	16,000
Total obligations payable out of reimbursements from other accounts	96,712	50,000	50,000
Obligations incurred	49,032,060	63,070,748	55,411,000

Analysis of Expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$36,717,629	$34,032,157	$49,545,903
Obligations incurred during the year	49,032,060	63,070,748	55,411,000
	85,749,689	97,102,905	104,956,903
Deduct:			
Reimbursable obligations	173,002	168,000	211,000
Unliquidated obligations end of year	34,032,157	49,545,903	48,745,903
Obligations transferred to "Construction (liquidation of contract authorization) Bonneville Power Administration"	21,000,000	4,096,400	
Total expenditures	30,544,530	43,292,602	56,000,000
Expenditures are distributed as follows:			
Out of current authorizations	30,544,530	25,000,000	24,000,000
Out of prior authorizations		18,292,602	32,000,000

CONSTRUCTION (LIQUIDATION OF CONTRACT AUTHORIZATION), BONNEVILLE POWER ADMINISTRATION

Amounts available for liquidation of contract authorization

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$21,000,000	$4,096,400	
Applied to contract authorization	−21,000,000	−4,096,400	
Obligations incurred			

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$5,821,933	$6,610,998	
Obligations transferred from "Construction, Bonneville Power Administration"	21,000,000	4,096,400	
	26,821,933	10,707,398	
Deduct:			
Unliquidated obligations, end of year	6,610,998		
Adjustment in obligations of prior years	2,635		
Total expenditures	20,208,300	10,707,398	
Expenditures are distributed as follows:			
Out of appropriations to liquidate prior year contract authorizations	20,208,300	4,096,400 6,610,998	

Mr. JENSEN. Before we start with the construction item please place into the record a complete list of the budget revision for the construction program which we started to discuss.

(The matter referred to follows:)

Proposed reductions in 1954 fiscal year budget request

CONSTRUCTION FOR 1954

Budget item No.	Name of facility	Proposed reduction	Explanation of reduction
118	McNary-Ross	$230,000	It will be possible to defer a 24-channel microwave system. Most essential aspects of systems' operations will be preserved with the presently approved microwave channels.
119	Southeast Portland area service.	557,000	Recent engineering studies indicate that loads in the Portland area can be handled by elimination of part of the facilities originally proposed for the new Eagle Creek substation. A portion of the facilities will be moved to the existing Oregon City substation and it will be possible to eliminate from the program several major items of equipment, such as circuit breakers.
148	Hot Springs–Spokane No. 1	196,000	The Administration proposes to defer completion of the proposed microwave extensions for at least 1 year. This is due to delays in delivery of material which will not permit completion of the work in the fiscal year 1954.
214	Quinault service	56,000	This proposed facility was to provide a point of delivery for the Quinault Light Co., an REA cooperative. Revised load estimates indicate that construction by the cooperative of the proposed extension to its system is not feasible at this time. Therefore, it is proposed to eliminate this item.
232	Columbia Basin service	195,000	Latest studies indicate that the Columbia-Ephrata line No. 2 can be deferred 1 year with a reduction in the 1954 fund requirements. A transformer at Coulee City, which was temporarily installed in the Washington Water Power Co.'s substation, will not be replaced for another year. This may result in operation conditions below the Administration standards, but will not jeopardize service to the customers.

Proposed reductions in 1954 fiscal year budget request—Continued

CONSTRUCTION FOR 1954—Continued

Budget item No.	Name of facility	Proposed reduction	Explanation of reduction
305	J. D. Ross substation additions.	$295,000	The major item involved in the budgetary review of this group is a testing laboratory building, construction of which is being deferred on the basis of possibility of renting testing services in California and in the East.
325	Tillamook service	330,000	Extension of service to the vicinity of the city of Tillamook with additional transformation at that point can be delayed from October 1955 to 1956 on the basis of recent load studies and the availability of steam generation for peaking at Tillamook.
624	Ferry County service	215,000	Revised load estimates for the Stevens County Public Utility District indicate that the loads in the Orient area have not developed as rapidly as indicated. Therefore, this item will be deferred.
705	Benton County service	49,000	Additional capacity in the Prosser substation for service to Benton County Public Utility District will be required, but revised load estimates indicate that it will be possible to defer this installation 1 year, until 1954.
810	General structures	292,000	This reduction consists of postponement of the following items: (a) A line control headquarters building at North Bonneville; (b) shed type buildings for housing of passenger cars, trucks, and trailer equipment at Covington, Olympia, and Alvey; (c) Chemawa, Kalispell and McNary maintenance buildings; (d) Ross helicopter hangar; and (e) economies have been effected by change in planning at Hot Springs for the auto storage, auto repair shop and maintenance buildings.
820	Communication facilities	100,000	Lower priority items of microwave, telemetering, and supervisory control have been deferred.
830	Tools and equipment	100,000	Reduction commensurate with total program reductions.
860	Warehouse stock	56,000	Reduction in spare parts requirements can be made commensurate with total budget cut.
	Total	2,671,000	

NEW STARTS

Mr. JENSEN. Now, you are asking $14,218,000 for new starts to reinforce the transmission grid commensurate with the increased generating capacity of the new Federal dams and to serve the growing needs of existing customers. The remaining amount of $2 million will be for generating plant purposes according to your justifications.

Will you take each new start and tell us its exact purpose and also tell us what the reaction of the private utilities is to these new starts, if any, and if any of them can be delayed at this time?

Dr. RAVER. The new items in our program are indicated in red on this map, and I believe we have the small area maps available so that you can have them immediately before you.

Mr. JENSEN. The reason I ask this question as to what the private utility reaction is, if any, to these new starts, is because I do not have tell you that the private industries in your area have, during the past several years, been supporting your recommendations quite completely. But we were never quite satisfied with that—this committee was not—because if private industry can build some of these lines which you are requesting, we want them to do it. You know that is the position which Congress has taken—that if they can build any of these transmission lines which you are requesting and give service to the people that we want given, then we expect them to do it. We are not going to let them take the benefits of this cheap power without

their doing their full share. And, by the same token, of course, we want them treated fairly and squarely. That is my purpose in asking that question.

Now proceed.

Dr. RAVER. Our procedure in that matter has been to take up each item in our proposal with the utility in the area where the item is proposed prior to bringing it to Congress. We do that for two reasons. One is to try to work these situations out jointly with our customers—engineering studies involving the need for a facility is a matter that is important to the consumer—and come to an agreement with the customer as to what facility is needed and when it is needed. So that ordinarily we come before you with items in our appropriation that have been agreed to between our customers and ourselves.

Mr. JENSEN. But not necessarily have they been agreed to by your Northwest power pool, which includes private utilities, public utility districts, and the Bonneville Power Administration. Occasionally there have been some disagreements.

Dr. RAVER. That is right; there are some disagreements. I have indicated we try to arrive at an agreement before we present it. If we cannot and still think we are right about it, we will present it anyway, and they can present their position against it. But there is not very much of that involved in this appropriation that I know anything about.

Mr. JENSEN. Now tell us about the new starts.

Dr. RAVER. I know one of them was the situation with respect to this capacity—putting the transformer from Eagle Creek into the Bethany substation. I think the engineer for the Portland General Electric Co. felt that transformer should go to the St. John's substation across the river. Our studies indicated that was not the most economical place to put it. We do not agree with him on it. But it does not involve the budget item; it merely involves the location of the transformer, which is an engineering question.

Now, I have a list of all of the items and the status as to approval or nonapproval by the customer involved. In other words, the customer's position is in it. There are a few of these stations where we do not know——

Mr. JENSEN. What do you mean by "the customer"? Of course, private industries and public utility districts are your customers, as well as other people and industries.

Dr. RAVER. If the facility is one in a territory served by a public utility district, for example, that we serve at wholesale, by "customer" I mean that public utility district. We have either come to an agreement with them as to the need for it, or a disagreement. If it is a facility serving a private utility company, we have either come to an agreement with them or not. In other words, each facility is for service to a particular customer, whether a private utility company, a public agency, or industry. And that is what I mean by coming to an agreement with the customer.

Now, we can go over each one of these, or I can put this in the record for your.

Mr. JENSEN. Include it in the record.

Dr. RAVER. I think in general there is a very good agreement with the customer.

(The matter above referred to follows:)

Summary of status of construction budget item clearances with customers

Item No.		Customer	Customer's position
111	Bellingham substation	Whatcom County Public Utility District.	Requests speedup.
111	do	P. S. P. & L. Co	Do.
116	The Dalles area service	Hood River Electric Cooperative.	Approves.
		Wasco Electric Cooperative	Do.
		Northern Wasco Public Utility District.	Do.
		Klickitat County Public Utility District.	Do.
		P. P. & L. Co	Needs further study.
		Harvey Machine Co	Needs additional facilities.
119	Eagle Creek 115-kilovolt connection.	P. P. & L. Co	Needs further study.
119	Eagle Creek-Oregon City	P. G. E. Co	Approves.
122	St. Johns-Bethany	do	Direct service from Bethany substation not required by P. G. E Co. in 1956.[1]
122	do	P. P. & L. Co	Has not replied to our inquiry
123	Chemawa substation	P. G. E. Co	Approves.
141	Midway-Moxee	P. P. & L. Co	Do.
143	Bell substation 230-kilovolt connection.	W. W. P. Co	Do.
143	Bell substation 230-13.8-kilovolt transformer.	Kaiser Aluminum	Not known.
143	Bell substation 230/115-13.8-kilovolt transformer.	Chromium M. & S. Co	Not known (transformer diverted to Riddle).
204	Upper Olympic Peninsula service.	Crown Zellerbach Co	Approves.
		P. S. P. & L. Co	Do.
		Clallam County Public Utility District.	Approves but temporary service can be delayed 10 months.
209	Olympia-Aberdeen No. 2	Grays Harbor Public Utility District.	Approves.
214	Quinault service	Quinault Light Co	REA has determined line to Aberdeen not feasible; hence BPA terminal at Aberdeen not needed.
218	Ilwaco-Long Beach service	Pacific County Public Utility District.	Approves.
219	Aberdeen substation additions	Grays Harbor Public Utility District.	Do.
222	Okanogan County	Okanogan County Public Utility District.	Do.
228	Orendo substation	Douglas County Public Utility District.	Do.
229	Ellensburg substation additions.	Kittitas Public Utility District.	Do.
232	Columbia Basin project service	Grant County Public Utility District.	Do.
233	Quincy substation	do	Do.
233	do	U. S. Bureau of Reclamation	Do.
234	Quincy-Burke	Grant County Public Utility District.	Do.
234	do	U. S. Bureau of Reclamation	Do.
299	Morton transformer replacement.	Lewis County Public Utility District.	Do.
305	J. D. Ross substation additions.	Clark County Public Utility District.	Do.
307	Vancouver Shipyard transportation No. 2.	do	Do.
307	Carborundum service	do	BPA has not received letter.
308	do	Carborundum Co	Approves.
312	Longview substation 69-kilovolt feeder.	Cowlitz County, Public Utility District.	Do.
321	East McMinnville substation additions.	City of McMinnville	Do.
325	Tillamook service	Tillamook County, Public Utility District.	Not known.
325	do	M. S. P. Co	No objection raised in meeting with area office.
334	Reedsport transformer No. 2	Central Lincoln Public Utility District.	Approves.
334	do	Douglas Electric Cooperative	Not known.
334	Florence substation	Central Lincoln Public Utility District.	Approves.
623	Deer Park substation additions	W. W. P. Co	Do.
		Inland Empire REA	Do.
		Pend Oreille Electric Cooperative.	Do.
624	Republic substation	Ferry County Public Utility District.	Do.

[1] This is primarily a main system item, needed for reinforcement of grid system in the area.

Summary of status of construction budget item clearances with customers—Continued

Item No.		Customer	Customer's position
624	Orient service	Stevens County Public Utility District.	Verbal approval to withdraw.
629	Valley Way substation additions.	Inland Empire REA	Approves.
629	do	Vera Irrigation District	Do.
633	Bonners Ferry-Troy	Northern Lights	Do.
633	Newport substation	Pend Oreille County Public Utility District.	Do.
633	do	Pend Oreille County Cooperative.	Do.
636	Columbia Falls service	M. S. P. Co	Do.
637	Kalispell substation additions	do	Do.
637	do	Flathead Electric Cooperative	Do.
637	do	Lincoln Electric Cooperative	Not known.
669	Hungry Horse terminal	Flathead Electric Cooperative	Approves.
705	Kennewick substation additions transformer.	Benton County Public Utility District.	Do.
705	Prosser transformer No. 2	do	Do.
705	Satus substation	Benton County REA	Do.
709	Riverview substation	Franklin County Public Utility District.	Do.
709	Ringold substation	do	Do.
711	Ice Harbor Dam service	Columbia County REA	Do.
799	Bingen substation additions	Klickitat County Public Utility District.	Do.
799	Milton substation additions	City of Milton-Freewater	Do.
799	Grandview substation additions.	U. S. Bureau of Reclamation	Do.
799	Burbank substation additions	Columbia County REA	Do.
799	Hood River substation additions.	Hood River Electric Cooperative.	Do.

REPAYMENT OF GOVERNMENT INVESTMENT

Mr. KIRWAN. I want to ask a couple of general questions. I was interested this morning in the microwave you were talking about and what that meant to your power system. Since we first created this Administration out there in the Columbia Valley, many things have been invented.

Dr. RAVER. That is right.

Mr. KIRWAN. I rode over to New York yesterday on a train. There were 23 cars on that train. Five years back it took 3 engines to haul that train, and yesterday there was only 1 engine, a diesel, and it was as smooth as glass. Now, they scrapped three engines that cost half a million dollars to build in order to put that diesel on there, just to do what you said this morning—cut down the cost.

I know when the Youngstown, Ohio, steel plant was putting in a new improvement some years ago at a cost of $33 million they never got it completed before they had a better mill and, to save time, they had to put in this new mill.

That is what you meant this morning about the microwave system; is it not?

Dr. RAVER. Yes, sir. The technological changes that are going on in the electric light and power industry are very significant. Some of the changes that have taken place have been developed in our own shop, as a matter of fact, and the whole industry is adopting them. They are all from the point of view of reducing the cost per kilowatt of this product.

Mr. KIRWAN. Reducing costs and at the same time producing and delivering more electricity and more power.

Dr. RAVER. That is correct.

Mr. KIRWAN. Now, not that I am taking issue with anybody or anything at all—and I want that to be remembered by the committee—down through the years I have voted for Bonneville and public power. I voted for it not to relieve anybody of taxes but to help them to pay more taxes and deliver more money to the Government, as you said this morning, by way of the interest payments to the Treasury.

You said, on top of this interest that you are paying into the Government, you have so much set aside out of every dollar for depreciation, and you claim that starting around 30 or 35 years from now, the cost of these projects is to be paid off. You are going to be able to get enough money from the sale of power to pay for depreciation and at the same time return every dollar of cost to the Government in 50 years. Is that correct?

Dr. RAVER. Yes, sir. And there is an additional item we are obligated to pay over and above this power investment. We have agreed in a contract with the Bureau of Reclamation, for example, on the Columbia Basin project, to absorb the part of reclamation development that cannot be paid off by the farmer. That is a part of our repayment responsibility in this whole picture. We have not come into the actual repayment of that as yet, because it is just getting started, but that is part of our obligation which will come out of power rates.

Mr. KIRWAN. But that conservation and all that flood control will come out of power; yet you will be able to pay back every dollar to the Government. Is that correct?

Dr. RAVER. No; we have no obligation under the present law to pay back the portion of the cost of the project that is used for flood control or navigation, but we have on reclamation.

Mr. KIRWAN. Let us put it this way: You expect and will be able to pay back every dollar that the Government has put in?

Dr. RAVER. That is right. The present law does not require us to pay back the reclamation subsidy with interest; that is without interest. Everything else is with interest.

Mr. KIRWAN. And will be paid back?

Dr. RAVER. That is right.

Mr. KIRWAN. Now, the Bonneville project and the others we have created—I remember when we were passing the legislation for the Columbia Valley the private industries and the Government did not get along, and did not try to get along, with one another. They were tossing stones at one another. Then I remember 6 months before they turned out a single kilowatt from the Columbia project at Grand Coulee they were calling on the farmers and telling the farmers if they would sign up with them for 5 years, they would put in the poles and wires free. And that is what went on. It is written into the record of that day in Congress. But they did not do that prior to that. It shows they can get along. I am not censuring anyone; I am only trying to bring out that there was room for everyone of them in the field.

Now, what I am leading up to is that starting off with the Hoover Dam, an old dam now and a great dam. California is fixed up and I mean not only California but also Arizona and Nevada. Without Hoover Dam, the recent migration could never have taken place into California. There is where they get the water and most of the power on the Pacific coast of California. All of the water for Los Angeles and other cities on the way to Los Angeles comes from that project. And you take the Shasta, Bonneville, Grand Coulee and all the rest of the dams developing this power: Because of the fact they were built, they are paying three times more taxes in all of those States today than they were before the dams were built.

I want to ask you this: do you not think every one of the States in the Northwest has benefited? The people have, and so has every private utility that takes power from a Government dam.

Dr. RAVER. I think so. I think the financial records show that. The private utility company stocks today, for all of the companies in our region, are at least twice as high in price as they were when Bonneville started and some of them much more than that. The Puget Sound Power & Light Co., I remember 15 years ago when we first started out there, was selling its stock at $2 a share. It is now selling at $27 a share. And the same thing is true of the Pacific Power & Light, the Washington Water Power, and the Portland General Electric Co. The Portland General Electric Co. was in the bankruptcy courts when we started out there. They have gotten out of bankruptcy and are on a sound financial basis, as evidenced by their stock sales, at least, and their income statements. And the incomes of other businesses in the area I think have gone up, as they have all over the country. It is not all just due to power, but I think the power development in there has had a very great influence on it, as well as reclamation and other conservation developments. I think there has been a great expansion in the basic resources upon which the free enterprise system has expanded.

Mr. KIRWAN. And you are also concerned with Government resources. I remember some years ago as a member of a committee standing on the banks of the St. Lawrence River—I went up there on a special train in 1939—the engineers pointing to it and saying "Congressman, have you seen the equivalent of 33 million tons of coal going into a hole that could never be recovered? You would holler to high heaven if you did." Now, the equivalent of 33 million tons of coal is going down that stream there, going over the rapids. That could have been avoided. And if we had built the St. Lawrence project at that time, it would have cost $155 million, and we would have had all of that power for Pennsylvania, eastern Ohio, New York, and the chairman might have had it in his district, and in my district. Now it is going to cost over a billion dollars to build that project, and it will be years before we can get the transportation or get the power.

I again say, not having done that, not having had the foresight to do it as in the Far West we have lost something I believe as I have said many times, that we cannot help Ohio, we cannot help

Pennsylvania where I originally came from, unless we help the other 47 States. They have to be helped by the resources in that neighborhood. There is no other way to help them. So when you developed power out there from that water resource, the fast-flowing streams, certainly business doubled and trebled because you were able to take industry there because you had cheap power. That was good for business, good for everybody in the community.

And I am happy to say, after your report this morning, as a member of this committee, that at Bonneville you are doing a very good job, as are all of the rest of you. Had everyone in connection with the Government done as good a job as you people, there would be no national debt, and there would not be any debt in the future. You are going to pay off—and I mean pay off—and at the same time pay taxes and pay plenty of taxes. You are paying plenty of taxes. And according to what you said, the utility stocks have trebled, one of them 10 times or 15 times the value of the stock when you went out there.

It looks like you have done a good job all the way around. You are both working together today and have both found out you can do business, both private utilities and the Government.

Dr. RAVER. I think there has been a great advance in the relationship between the Government and private utilities and public agencies as well as industries in that region. I can remember back in the early days—and so can you—when that was not true. I think we have gradually worked out the basic relationships through contracts that are recognized as being in the public interest for both sides. And I take pride in that because I think every segment of the economy should be able to work out a relationship with its own Government on which they can live together and work together. And we have had a long period of controversy about it, but we have made great strides in that direction, and I think we will make some more.

Mr. KIRWAN. And if you continue to do that, we won't have to worry so much about what is going to happen to us from the outside, if we can work together on the inside.

Dr. RAVER. That is right.

SOURCE AND DISPOSITION OF REVENUES

Mr. NORRELL. Dr. Raver, I have been interested in your breakdown this morning of the Columbia River power system's source of revenue dollars. I do not plan to go over those questions, but I want to see if I understand how to construe it.

First of all, of course, we know you are a wholesale seller of electricity. I understand from that chart that 32.29 percent of the revenue dollar came from publicly owned utilities; 21.22 percent from privately owned utilities; then the aluminum industry, 33.29 percent; other industries in that area, 11.57 percent; and other electric revenues amounted to 1.53 percent. I assume that covers the 100 percent of your sales, both from hydroelectric dams and steam plants or any other source of power that you may have.

Dr. RAVER. That is correct. We have nothing but hydro. It is just from the two dams—Bonneville and Grand Coulee—in the fiscal year 1952. We did not operate any steam plants.

There was a steam plant bill before the Congress, but it did not pass.

Mr. NORRELL. Now, Dr. Raver, you gave us the total of the money you had gotten, I believe, this morning. The reasoning you had here as to where your dollars went is found on this other chart. I am not going to review all of those matters, but will get down to what I want to talk about.

Fifty-seven and thirty-four one hundredths percent was available for repayment of Federal capital investment. I assume that is the amount of money that is left after costs of operation, maintenance, interest, depreciation, and so forth; that is the amount available to take care of the public debt.

Dr. RAVER. That is right. Depreciation is included in the 57.34 percent.

Mr. NORRELL. Now, is the statutory authorization regarding taxes or the equivalent of taxes for schools and the amount paid to reclamation included or deducted from the 57.34 percent?

Dr. RAVER. I am sorry. I do not understand what you mean.

Mr. NORRELL. You know we have a statute that says part of every reclamation dollar on reclamation projects especially—I do not remember whether that covers power; I assume it does not—that part of every reclamation dollar that comes in goes back to the reclamation fund. That only applies to the reclamation angle; it does not apply to the sale of public power. Is that right?

Dr. RAVER. On all of the reclamation projects—of course, we only have one, and that is Grand Coulee—the money that we pay or that is assigned to the Reclamation Bureau, I assume, goes into the reclamation fund. It is up to them to handle it.

Mr. NORRELL. Do you pay that into the Treasury and then it comes out of the Treasury back to them, or do you pay it to them directly?

Dr. RAVER. I will have to ask our controller.

Mr. OSTRANDER. In the case of the Columbia Basin project, which is a reclamation project, we turn over to the reclamation fund an amount of the receipts to cover their cost, $11,100,000 a year. Before the reclamation people can use that, it will have to be reappropriated by Congress out of the reclamation fund.

Mr. NORRELL. What I am trying to get at is this: the money you give directly or indirectly to the municipalities, school districts, or States, or reclamation fund—does that come out of money available for repayment of the capital investment, or is it included?

Mr. OSTRANDER. I believe the reclamation projects do make some payments to the schools. Is that what you mean—sort of in lieu of taxes?

Mr. NORRELL. Yes.

Mr. OSTRANDER. That money would be included in the expenses, except part of it might be charged as part of the capital cost of the project. But the expense portion would be not in the 57 percent but in the expense percentage shown in the chart.

Mr. GOLDHAMMER. That is 21.76 percent.

Mr. NORRELL. Would there be any way of determining the total money that has been expended from, let us say, your total receipts—not the capital investment but the total income—that goes into the Treasury? By "net," I mean after you deduct everything you must

pay plus the total amount of your earnings that have been expended by the Congress to other agencies, such as the reclamation fund, municipalities, counties, cities, school districts and things of that nature.

I know it does not come under your jurisdiction and you are not responsible for it; you have nothing to do with it; but I know Congress has authorized certain moneys coming in from those funds to be turned back to the States and the cities and the school districts and the Reclamation Service and a multiplicity of other matters. You have nothing to do with it, but I am trying to ascertain if there is any way of determining what is the net amount, the unattached amount, unallocated amount, that goes back into the Federal Treasury and stays there.

Mr. OSTRANDER. You would like to know how much the Bureau of Reclamation has paid to the States or school districts?

Mr. NORRELL. No. I am talking about the income from the Bonneville Power Administration. Part of your income gets back into the Treasury, and you get their receipt for it; then, as I understand it, it goes to or is credited to the reclamation fund.

Mr. OSTRANDER. Yes. We can tell you how much we have returned to the reclamation fund from our power receipts.

Mr. NORRELL. And how much goes to the schools; can you do that?

Mr. OSTRANDER. We can tell you how much we have returned to the reclamation fund.

Mr. NORRELL. If you were the United States Treasury and you expended this money and then you collected some income back, you would like to know how much would remain in your pocket after you got through spending your receipts which, according to the laws as laid out by somebody else, would still remain yours. That is what I am thinking about.

(The matter referred to is as follows:)

FUNDS RETURNED TO TREASURY BY THE COLUMBIA RIVER POWER SYSTEM

The following is an analysis of funds returned to the United States Treasury to June 30, 1952, by the projects of the Columbia River Power System. Funds applicable to Bonneville Power Administration and Bonneville Dam are returned to the general fund of the Treasury while those applicable to the Columbia Basin project are deposited into the reclamation fund. Funds to cover operation and maintenance are shown separately in order to present the total of deposits that was available for all other purposes, including interest and amortization of Federal investment.

	General fund		Reclamation fund, Columbia Basin project	Total
	Bonneville Power Administration	Bonneville Dam		
Total deposits to June 30, 1952	134,089,932	41,975,523	75,779,938	251,845,393
Payments to cover operation and maintenance [1]	44,614,004	7,242,526	13,330,903	65,187,433
Balance of deposits available after providing for operation and maintenance	89,475,928	34,732,997	62,449,035	186,657,960

[1] Includes, in addition to appropriations to cover annual operation and maintenance, amounts representing goods and services furnished at no charge by other Federal agencies (BPA, $1,554,226; Columbia Basin project, $1,235,823).

To June 30, 1952, the Bonneville Power Administration covered into the reclamation fund to the credit of the Columbia Basin project cash receipts in the total amount of $74,718,679.68. In addition the Columbia Basin project deposited miscellaneous power receipts, arising from its own operations of $1,061,258.72, making a total deposit to June 30, 1952, of $75,779,938.40. The repayment plan agreed upon by the Administration and the Bureau of Reclamation provides for the deposit of $11,100,000 per year for 1953 and future years in the reclamation fund for the account of the Columbia Basin project.

Included in funds returned to the Treasury on account of Columbia Basin project is an amount of $144,708.46 representing payments to school districts in fiscal year 1951 under Public Law 835 (act of June 29, 1948, 80th Cong.) as follows:

School district	Amount	Type of assistance
Grant County No. 150-204, Coulee City, Wash	$9,786.80	Services.
Grant County No. 165-55, Ephrata, Wash	13,275.54	Do.
Grant County No. 55-201-205J, Grand Coulee, Wash	5,175.73	Do.
Grant County No. 144, Quincy, Wash	5,630.41	Do.
Grant County No. 156, Soap Lake, Wash	5,732.19	Do.
Grant County No. 146, Warden, Wash	5,521.34	Do.
Grant County No. 156, Soap Lake, Wash	96,337.92	Facilities.
Okanogan No. 14, Nespelem, Wash	3,248.53	Services.
Total	144,708.46	

According to Bulletin 1952, No. 12 of the Federal Security Agency, Office of Education entitled "Federal Funds for Education, 1950–51 and 1951–52" further operations of this fund for educational services and educational facilities will be made through the operation of Public Laws 815 and 874 of the 81st Congress. This bulletin shows that for the 3 years 1949–51, $138,939 of Federal funds were allotted to the State of Washington for the education of dependents of persons employed at reclamation projects and for the same 3 years, $1,328,299.92 of Federal funds were allotted to the State of Washington for educational facilities for the education of dependents of persons employed at reclamation projects. The Bureau of Reclamation has indicated that if data are required for back years for payments made pursuant to the earlier legislation, namely Public Law 835 of the 80th Congress, it will request the preparation of a report on the matter by the Project Office of the Columbia Basin project.

LOCATION OF INDUSTRIES IN RELATION TO SOURCE OF POWER

Now, I am very greatly interested in Bonneville. I have always gone along with it. I think it is a great program. But the other States in the Union are interested in knowing how many dollars are spent out there and actually how many dollars they get back that are not rechanneled to that area but may remain in the Treasury.

I know you have a congested situation in some parts of the State. Therefore, it looks like transmission lines must be built into these areas. But that is made necessary, Doctor, because there is, we will say, an aluminum plant at Spokane, Portland, or somewhere in that area that wants your power. Now, you have nothing to do with the location of that plant there. I know that. But we could save the construction of a transmission line out there from somewhere at a distance, from Hungry Horse or Grand Coulee, if some of those industries would locate close to where the power is produced.

Dr. RAVER. I think they are going to have to from here on out, pretty largely because I am inclined to agree with you that we should not devote a major segment of our transmission capacity to the heavy power-consuming industries far removed from the dams. Some of those you can avoid, and some of them you cannot.

Mr. NORRELL. I think that is correct, and I know about the one located in Washington. That is all right. It is a good State. I

have been there. And everything that has been said is true. However, I know how bad it is for power to be produced by somebody and then have it taken away and used somewhere else. We would like to have all of the industries in my State and transmit all of the power down there, but it just ought not to be done quite that way.

Dr. RAVER. You get into some rather difficult problems on that. Every community wants an industry, whether you have to build a transmission line 100 miles or whether it is right at the dam. What we are trying to develop here basically is an integrated high-capacity transmission system for power, tying in the various sources of supply in the entire region in one pool. Now, theoretically, if that is done and you have power for sale, the industry ought to be able to locate any place in the pool that it decides is the most economical to locate.

Mr. NORRELL. Under those circumstances, you can send power anywhere you need it?

RATE DIFFERENTIALS ON BASIS OF CONSUMER LOCATION

Dr. RAVER. Yes. But there are limitations to that under the basic act; and in our revision of our rate structure, which will have to come sometime between now and 1954, according to our present contracts with distributors, we are giving serious thought to increasing the rate for power delivered over a transmission line and leaving the present rate alone for the sale of power close to the dams. We have two rates now. We have a rate that is really practically a busbar rate within 15 miles of the dam. That is a rate that was established at the very beginning of our operations. The differential, however, has not been enough to attract any of these big, heavy, power-consuming industries close to the dams except at Kalispell, Mont., where the Anaconda Copper Co. is now in the course of building an aluminum plant within about 7 or 8 miles of the Hungry Horse Dam under that lower rate. It does not require much in the way of transmission.

I am telling you what we are thinking about now as a device for accomplishing the very thing you are talking about; namely, broadening the differential between the at-site rate and the delivered rate to encourage these heavy consuming industries to locate closer to the dams and avoid constructing more transmission lines. I realize that is a policy question which will certainly have to be cleared by the Secretary of the Interior and probably by this Congress. I am not determining those policies.

Mr. NORRELL. But this committee has a lot of confidence in you and always has had, and we are inclined to go along pretty well with what you recommend. I do not know anything about engineering problems; I know something about law, or used to think I did; but I have to take somebody's word in regard to generating matters.

Mr. JENSEN. Following through on your colloquy with Mr. Norrell, I want to ask this question: Is there anything in the act which created the Bonneville Power Administration which allows the Bonneville Power Administration to have one set of rates for some customers and another rate schedule for other customers receiving the same service? Do you have that authority?

Dr. RAVER. No, sir. There is nothing in the act that sets up the so-called at-site rate. The act provides that the rate schedules shall be prepared by the Bonneville Administrator and submitted to the

Federal Power Commission for approval. And that procedure was followed, as a matter of fact, before I became Administrator. One of my first acts as Administrator, I remember, was approving the new rate schedules or putting into effect the new rate schedules which had just been approved by the Federal Power Commission. And one of those rate schedules was the so-called at-site rate schedule which provides that we will sell power at $14.50 per kilowatt-year within a radius of 15 miles from the Bonneville Dam and at $17.50 per kilowatt-year for power delivered over our transmission system to any other point in the entire region. Those rates have remained in effect ever since I have been there.

Mr. JENSEN. So you contend you have not in any sense exceeded your authority under the act that established the Bonneville Power Administration. You say the act does provide that the Administrator shall set the rates and they shall go into effect after approval by the Federal Power Commission?

Dr. RAVER. That is correct. And the act provides that in fixing those rates we must cover the costs.

EFFECT OF INCREASED COSTS ON POWER RATES

Mr. JENSEN. Then you speak about power rates having to be increased in 1954. I presume the reason for that is that the facilities you are furnishing—the power facilities, transmission facilities, and other related facilities that you must purchase now—are much higher than they were when Grand Coulee and Bonneville were built, and labor costs are much higher. In order to comply with the law and pay back the investment, that part which the Congress appropriates for those things that must be paid back, the present rates will not be sufficient because of the increased cost of construction and operation. Is that a fair statement?

Dr. RAVER. That is correct. As I indicated this morning, our cost per kilowatt-hour of power delivered, so far as transmission is concerned, is going down because of improved technological developments here and of going to larger size conductors, transformers, and so forth. But the cost of these dams is going up at a very rapid rate, and there is nothing we can do about that technologically, so far as I know, in reducing the cost per kilowatt of installed capacity.

Now, the impact of what is coming, I think, is very well illustrated on the fourth chart of this little bunch of charts. You will notice in the year 1953—that is the year we are now in, which closes on June 30—our interest cost alone goes up from $7,608,000 to $10,732,000. And in 1954 our interest cost goes up to $16,132,000. And 1954 is the year when we think we will have to begin raising these rates. And our net revenues in the year 1954, very largely as a result of that interest cost, are reduced to an estimated $4,233,000, whereas this year, as we reported to you, we had over $15 million of net revenues.

Now, what is happening is that these new facilities, these new dams, are coming in. Hungry Horse came in this year. That accounts for part of this increased interest cost already. McNary is coming in next year, then Detroit, Chief Joseph, and these other dams are coming in one year right after the other. And only a few generators are in at the start of operations, so that we have all of

that interest cost to carry, pending the putting in of more generators and getting more revenue to cover the interest cost on the total investment in the dams. We run into a difficult period here for about 5 years, at least, to cover our total costs, and we are planning to make these rate changes do it in 1954. This hump in our costs results from delays in our schedules for new dams in 1946 and trying to catch up with demand for power since that date.

Mr. JENSEN. Of course, we all know that you in the Columbia River Basin are in a more favorable position than any other river valley in America, and possibly in the world, because of the fact that there is just one Columbia River and it can generate power cheaper than any other river in the country. However, we find ourselves in the rather embarrassing position right now, so to speak, in many other areas, so far as hydroelectric power rates are concerned, especially in those places where we have these great dams under construction and must pay these terrifically big prices for all of these facilities. We have a law that says they must pay out, and that law was written quite some years ago. We have been going around over the country telling folks they were going to get this electric power for so much a kilowatt, and they have been planning their business and their future dealings with the hydroelectric power people under those conditions and under those proposed rates.

Now, in the past 6 or 7 years especially, all the costs have gone up terrifically—around 75 percent, as I remember. And if we were to add 75 percent to the rates we have been telling the people they were going to get this power for, we would price ourselves out of the power business. Actually, it would kill the sale of this power that we are generating from these hydropower plants. I am talking about the areas that are building their main power producing and transmitting facilities. We have quite a problem, knowing that steam plants have been improved to the point where they can produce steam power cheaper than they could even 5 or 6 years ago.

We have a situation in the State of Nebraska, for instance, where I do not know of a single town that has asked for hydro power from the Missouri Valley projects because of the very fact that they can produce power for less than they can buy it from the Missouri Valley projects.

Now, you say that does not sound quite reasonable, but those are facts that we just have to contend with.

Dr. RAVER. That is right.

Mr. JENSEN. I do not know how we are going to meet the issue. We have to sell this power; it absolutely has to be sold in order to pay out. But how we are going to adjust these rates and adjust the payout period is another matter. I know we are going to have to get down to some pretty conservative business principles in order to get the job done. It is just one of those things we have to cope with. We are going to have to be able to reduce costs of all of these projects to the minimum; we are going to have to keep the personnel down to the minimum in order to stay in business and to market this power from these hydroelectric power plants that are now under construction.

POSSIBILITY OF DELAYING SOME CONSTRUCTION

I am wondering, Dr. Raver, if some of these transmission and substation facilities which you are proposing at this time could not be properly postponed because of the fact you can build transmission facilities pretty fast. If there are any of them that we could properly at this time postpone until a later date, I think it should be done.

Dr. RAVER. Mr. Chairman, we certainly have analyzed that problem very carefully in a sincere effort to do that very thing. So far as I know—and I will certainly want to be checked here by our chief engineer and our power manager—the schedule of transmission installations and substation installations that we are now submitting is a schedule that is tied in directly with the schedule of installation of generators by the Army and by the Bureau of Reclamation. If their schedules are delayed, then ours can be delayed, but we do not want to be in the position—and I know you do not want to be in the position—of having a generator coming into a dam and the transmission facilities not prepared and adequate to take away to the market the power where we can sell it.

Mr. JENSEN. I certainly do not.

Dr. RAVER. Now, we have that basic scheduling problem, and it is not an easy problem. Here we are dealing with three agencies, each with its own schedule, and these schedules have to be prepared years in advance, really, and continually checked and rechecked as to how each schedule is going. They have to be keyed in with the delivery of materials by the manufacturer with what his schedule is, his construction schedule, with the contractor who is putting the stuff in. All of those schedules present to us a major problem in logistics, I guess is what you would call it.

Mr. JENSEN. I recognize that.

Dr. RAVER. Now, there may be places where we can delay; but, as far as we are able to determine now, we have pulled it down to a point that we think is the minimum risk we can take on timing.

Mr. JENSEN. All I am asking is that you take another good look at it.

Dr. RAVER. We certainly will.

In that connection, just within the last 3 weeks, we were able to cut another $1,900,000 off this year which can be delayed or be available for next year's appropriation.

Mr. JENSEN. Maybe within the next 2 weeks you can find something else.

POLICY WITH RESPECT TO SUBSTATION CONSTRUCTION

Is it not a fact that the Bonneville Power Administration furnishes all of the substations and transformers for the PUD's, the private utilities, and municipalities, when it would appear that some of that expense should be borne by the users themselves instead of just furnishing everything for the folks who get the benefits of this cheap power?

Dr. RAVER. That certainly is a basic policy matter that is subject to review by you and the Administration and the Budget Bureau. That is a basic policy question which has been threshed out time and again. We have an agreement with the Budget Bureau as to what that policy is, and we are carrying it out, and I think there is no disagreement. The new Budget Bureau may disagree with it.

Mr. JENSEN. Why don't you say to these new users or even the old ones, "Now, we are going to give you more power and more steady power, but there is a limit to all things. It is going to take some additional substations or improvements to substations or some additional transformers in order to give you this additional service. Now, we are going to ask you to shoulder part of that load." I just believe they would do it if you would simply say to them they are just going to have to do it if they want this additional firm power and steady flow of power that you will give them when these facilities are completed.

Dr. RAVER. That is right. The policy question has several basic aspects to it. One is if the customer puts in the substation, in effect, he is having his rates raised. It is the same thing. In other words, if we put in the investment, we charge him for it and we are covering it in our costs. If he puts it in, in effect, that is a rate increase for him.

Second, if you do it that way, the little fellow gets the worst end of the deal. The big fellow can do it more easily than the little REA and small company.

Mr. JENSEN. I wonder if he does over the long pull.

Dr. RAVER. I do not know; maybe not.

Third, one of the major problems I think in that is a technical problem. Our substation is really a part of our transmission grid. It is a control center for our service. If you put that in the hands of a customer you lose control of a good part of your ability to maintain your system and operating conditions. If you have breakdowns any place in the system your control device is in the hands of one of your customers instead of in your central dispatching office.

As long as we have to have technical people to operate our system anyway it is more economical for the ultimate consumer for us to operate those substations than for every consumer to set up a technical staff of his own competent to operate those big substations. Here again, the little fellow, the REA co-op, would suffer more than the big fellow.

Mr. JENSEN. That may be true. It may be more economical for the ultimate consumer; but, of course, the job that we have on this side of the table, and the job that you have is to also see to it that all of the taxpayers of America are treated properly and that the consumer pays his fair share for the taxpayers of America to make these facilities available.

Dr. RAVER. That would be particularly true and would be especially true, certainly, if we were not paying our way. We have to adjust our rates to cover the cost of these things. If we do it the ultimate consumer is paying for what we are doing here, but he is paying a smaller price than if every one of them did it for himself.

Mr. JENSEN. Even if you paid a little more than your way we would not hate you for that, Doctor.

Dr. RAVER. I think we are.

Mr. JENSEN. We need every dollar in the Federal Treasury that we can get or one of these fine days there will not be anybody who will get anything out of the Federal Treasury. It is empty now andwe are working on somebody else's credit. We are way ahead to our children and grandchildren for credit now.

Dr. RAVER. But that policy goes back to the rate question. We have to charge enough to do it. If we want more surplus we ought to charge still higher rates than we are doing.

Mr. JENSEN. What I am trying to say is that we will not be mad at you if you can make the job more than pay off and show an even greater profit than you are now, and do it justly and fairly toward everyone concerned.

REDMOND-KLAMATH FALLS LINE

Can you tell us why it is necessary to build that Redmond-Klamath Falls line? Is it not a fact that private utilities are ready and willing to build any line that is necessary down there? Is it a fact that the P. G. and E. of California have an interchange deal with the California-Oregon Power Co. to integrate their facilities, which will take care of all of the needs of the people of that area without the expense of building the Redmond-Klamath Falls line?

Dr. RAVER. Well, in answering that question let me begin by——

Mr. JENSEN. Of course, you have some money to build it already. You are building it. But I would like to know to what point you have that line constructed.

Dr. RAVER. It is constructed about 30 miles south of Redmond The materials are on hand for completing it to Klamath Falls. Contracts are out for bid and will be opened within the next 2 weeks for finishing it to Klamath Falls.

Mr. JENSEN. All right. Tell the committee why you have to have that line to Klamath Falls.

Dr. RAVER. The studies that were made of the load situation in Klamath Falls a number of years ago, before we started construction of this line, made it apparent that it would be economically justified to have the line built. We had a series of conferences with the California-Oregon Power Co. in which it was agreed that the Bonneville Power Administration would build transmission from its proposed Redmond substation south to Klamath Falls, which would augment the power supply in the Klamath Falls area, and that the California-Oregon Power Co. would in turn agree to make power available from new generating facilities that this company is building in the Toketee area on the west side to the Bonneville Power Administration loads on the west side of the mountains. Accordingly, BPA's 230-kilovolt-amperes to Klamath Falls was budgeted for and construction started. The line is to be completed in the fall of 1953, after which time approximately 55,000 kilowatts will be delivered to the California-Oregon Power Co. at Klamath Falls for their own service to their own loads, in return for equivalent deliveries by the company from its generation to Bonneville Power Administration in the Roseburg area. The requirement in the Klamath Falls area in excess of the available generation is estimated at 55,000 kilowatts for this fall.

Since starting construction on the line to Klamath Falls the Bonneville Power Administration has entered into an agreement with the Hanna Nickel & Smelting Co. to serve starting in 1954 the electric process requirements of that company in the new defense nickel plant near Riddle, Oreg., which is in the service area of the California-Oregon Power Co. near Roseburg. Firm power in the amount of 65,000 kilowatts will be delivered to the nickel plant, and an additional 15,000 to 20,000 kilowatts of interruptible power will be required whenever the Administration has it for sale. This will increase the amount of power which the California-Oregon Power Co. generating

plants will deliver for Bonneville's load in the Roseburg area, for power delivered by Bonneville to the company in the Klamath Falls interconnection.

In other words, since these plans were originally worked out with the California-Oregon Power Co. there has been a completely new element thrown into the picture, with a 65,000-kilowatt nickel load outside of Roseburg. The problems associated with serving any such a large load and taking care of the increasing needs of the southwest Oregon area are complicated by new developments and changes in plan of some of the utilities in the area, the short time in which facilities must be constructed to serve the nickel mountain load, and the need for additional appropriations. But it is clear now with this nickel load coming in beginning in 1954, in the fall of 1954, and reaching its total requirements sometime in 1955, that we should speed up the construction of our 230,000-volt facilities from the Alvey substation south to Roseburg on this (west) side of the mountains in order to serve this nickel plant, as well as complete this line to Klamath Falls, because the two things are tied together in the system studies.

Now, if the Pacific Gas & Electric Co. is coming in from the South with some new plans that we knew nothing about when all of this was worked out with the company, we will have to study them and see what can be done about them. As near as I can figure out, if the Pacific Gas & Electric Co. is going to come north with power in this picture, then the California tie line is needed more than it ever was needed in order to stabilize and balance the power relationships between Bonneville, both on the west side of the mountains here and the California-Oregon Power Co. on the east side, and the Pacific Gas & Electric Co. coming in from the south. A strong 230-kilovolt tie-in there is indicated more than ever just from the point of view of the best operation of all parties concerned.

This arrangement originally was worked out with the California-Oregon Power Co. without any relationship to the California tie. The imposition of this new nickel load which we have agreed to take on, as a national-defense emergency measure, has emphasized the need for the California tie-in balancing this electrical system. If we are not careful, here is what can happen: These companies need to work this thing out with us in their interest as well as in the Government's interest. There will be a 65,000-kilowatt nickel load coming in here.

The California-Oregon Power Co. is developing generating supplies right in this area, on the Toketee River, which can be used to supply that load. That is the cheapest and the easiest way to do it, provided we can give them power in exchange for that power that they will provide to us. The place for us to give that power in exchange is at Klamath Falls, instead of having them build heavy transmission from their new generating facilities over here [indicating] down to here [indicating]. They can deliver it right into that load for us.

That is the kind of arrangement which is indicated now more strongly than it was when we entered into this picture in the first place. If that exchange arrangement is not worked out, what can happen is that we will be wasting hydroelectric power from our system while they are buying steam power from California, which does not make any sense for anybody except maybe for the Pacific Gas &

Electric Co., which would like to sell it. It does not make any sense from an economic point of view.

Just how that is going to be worked out in this development, with the Pacific Gas & Electric Co. coming into this picture at the last minute, is a new problem. I do not know at the moment how it is going to be handled.

I have some information within the last day—it just came last night—that they are proposing to contract for additional power supply with COPCO, which might change this relationship we had worked out with COPCO.

Mr. JENSEN. Well, I am going to tell you frankly on the record I have had no positive information of that nature whatever. I am asking you these questions, Doctor, from the standpoint of trying to find out whether or not it is necessary for the Federal Government, the taxpayers of America, to furnish the money to build these lines which you are asking for. If this is not necessary, and if private industry can build them with their own money we will expect them to do it. That is my purpose. I have never talked with anybody from either the P. G. & E. or the Oregon-California Power Co., which operates in that area, since during the hearings last year.

Dr. RAVER. Well, I know that is true. I am just telling you what has come to my knowledge here within the last 24 hours.

Mr. JENSEN. Let me ask you this question: When did you last have a meeting with those two private power companies regarding this proposal, to work out an arrangement which would be best for all concerned?

Dr. RAVER. We have been having almost continuous conversations with the California-Oregon Power Co. since the Hanna Corp. decided to locate a nickel plant here [indicating] at Nickel Mountain, which is right below Roseburg, which is right in the territory of the California-Oregon Power Co.

The Hanna Corp. secured a certificate from the Defense Production Administration on the basis of a large deposit of low-grade nickel ore that is located there. Nickel being a critical material, they were given a high priority.

We have been conducting board studies. Mr. Schultz mentioned this morning that we have a calculating board on which we simulate the operation of the entire system. Putting this new load into the system of the California-Oregon Power Co., we see how that system and our system can work this thing out to work most economically.

Now, the information that has come to me here within the last 24 hours about a new source of supply coming south from the Pacific Gas & Electric Co. is disturbing.

Mr. JENSEN. I thought you said "coming south." You meant coming from the south?

Dr. RAVER. Yes. As to what effect that is going to have on balancing the supply of the California-Oregon Co. in serving this new load, and balancing our supply into Klamath Falls, is something we have to work out technically. I do not know today what the answer is. That is the reason I am disturbed about it.

Mr. JENSEN. Now, since we have learned more about it than we knew before we started this colloquy, and since you have told us that you propose to let a contract for a portion of that line within the next 2 weeks, do you propose now to have another meeting with those two power companies?

Dr. RAVER. I think this must be settled before we go ahead with any other contracts.

Mr. JENSEN. That is what I naturally assumed.

Dr. RAVER. True, I still think we ought to go ahead, and this line ought to go in there, but what kind of relationship we are going to work out here is now somewhat up in the air.

Mr. JENSEN. Of course, the committee will have to know about it.

Dr. RAVER. That is right.

Mr. JENSEN. After you have your meeting with those people then may we have your statement on it by mail?

Dr. RAVER. Certainly. As I say, we are having this board study completed now.

Mr. JENSEN. All right.

Dr. RAVER. It started some days ago on the whole situation; but with this new information I do not know what it will do to this board study. Do you have any information on it, Mr. Schultz?

Mr. SCHULTZ. Their engineer, who has been working with our engineers almost constantly over the last 2 weeks, is in Portland now, and we are studying ways and means of trying to serve this load down there around Roseburg with a minimum of facilities. They are working with us and we are trying the various combinations. Up until yesterday, until this bit of news Dr. Raver mentioned came to our attention, it was our understanding that they recognized the need for the line to Klamath Falls wholly apart from its implications with the California tie. They felt they had to have that line as part of the quid pro quo in the interchange of energy, and I believe that is still going to be the case. I think the big question is one of timing.

This nickel load has come along and the urgency is so great that we are, frankly, worried about how we can get it done on the time schedule. First of all, there is the problem of dollars we must get to do the work with. Second, there is the problem of clearing the right-of-way. You know that right-of-way clearing problems are extremely difficult, costly, and time consuming, especially when you have fire seasons and all of that to contend with.

Then we have the problem of getting certain materials, but I think getting the materials is going to be minor if we can solve the first two problems.

Mr. JENSEN. All right.

Dr. RAVER. I want to point out that we have had no contract with the California-Oregon Power Co. on this arrangement. It has been a verbal understanding which we have gone ahead on in good faith. I see no reason for assuming that it would not be carried out. But if there is a new element in the picture that we did not know about, I just do not know today what the answer is. I certainly think the committee is entitled to know it, and so am I, just as soon as we can get it settled.

INDUSTRIES SERVED BY BONNEVILLE POWER

Mr. FENTON. We had a little talk here before the session started this afternoon about the economic position of certain parts of the country. Outside of the defense industries which are located in your area, and the particular mining companies which are established or asking for plants and power, like the nickel you just cited, what other type of industry is there which you are supplying?

Dr. RAVER. Those are the only types we are supplying. The other industrial development in the region is all supplied by the distributors that we sell our power to. It is primarily based on timber. That is the one great natural resource, timber, in the Northwest. We do not supply them directly. They buy their power from our distributors, with one exception.

We do have a contract with one timber business clear up on the Olympic Peninsula, which was entered into primarily because they had generating capacity of their own. They had hydro, and they wanted to integrate their hydro system with us, and we entered into a contract that gives them some power for their own plant, up in the Port Angeles area. Outside of that we do not serve any industry directly, except these high-load-factor defense loads that have come in, that have never been in the area before.

So there is no competition with existing suppliers of power of industry, and such industry as we have in the region, outside of the aluminum and electrochemical and electrometallurgical. This nickel is an electrometallurgical high-load factor, heavy power-consuming load. All the other industries in the region are primarily based on timber and agriculture.

Mr. FENTON. By "suppliers" do you mean your suppliers?

Dr. RAVER. The distributors, the private utility companies, public agencies and so on which retail this power that they buy wholesale from us. They handle all the industrial loads except these defense loads I have mentioned.

RETAIL RATES

Mr. FENTON. How do their rates compare with yours?

Dr. RAVER. Our rates of course, are wholesale. They resell it at various rates to cover their cost for retailing and distributing. The average cost of the retail business out there is about in the neighborhood of 1½ cents per kilowatt-hour, I should judge, including the residential and the farm business that they have. The industrial rate is probably about an average of perhaps 6 or 7 mills.

Mr. DITTMER. Probably somewhere in that neighborhood, yes. It varies from 3 mills up to perhaps a cent.

Mr. FENTON. How much?

Mr. DITTMER. A range of, say, 3 mills in Tacoma up to perhaps a cent or more for small industrial uses.

Mr. FENTON. The retail rates are about 1½ cents?

Dr. RAVER. The average overall is around 1½ cents, I think.

Mr. FENTON. Offhand do you know how that compares with the rates for retail in the East?

Dr. RAVER. Yes, we have had comparisons made. I think the average for the United States is around 2½ cents, or something like that, as compared with the average in our territory of about 1½ cents.

As a result of that differential we have more than twice the consumption per customer in our area that you do in the country as a whole for electricity.

Mr. FENTON. Thank you, Doctor.

INDUSTRIAL POWER LOAD

Mr. BUDGE. Doctor, continuing that one step further, that is probably why you have these high-load industries located there.

Dr. RAVER. There is not any question about it. Our low rate is the thing attracting high-load factor industry.

Mr. BUDGE. How many individual plants of high load do you have? There is aluminum, nickel, and things of that kind.

Dr. RAVER. About a dozen, I believe.

Mr. BUDGE. How many are you now committed to serve in the future, in addition to those?

Dr. RAVER. We are committed to serve the Anaconda Copper aluminum plant at Columbia Falls, Mont.; the Harvey Machine Co. at The Dalles, Oreg.; the Hanna Corp. nickel load at Riddle, Oreg., that I just mentioned; and we are committed to take over the Wenatchee aluminum plant of the Aluminum Co. of America, which is in existence there and was built in conjunction with putting the new generators at Rock Island Dam by the Chelan County PUD. We take that load over from the Chelan County PUD beginning with the first block in 1955; the second block in 1956; and the third block in 1957. Can you think of anything else?

Mr. SCHULTZ. Bellingham.

Dr. RAVER. No; we are not committed to take the load at Bellingham. The General Petroleum Corp. is putting in a new refinery at Bellingham. They have a 10,000-kilowatt power requirement which we are transferring over our facilities, for the account of the Whatcom County PUD, and they are buying that power from a new dam built by the Pend Oreille PUD on the Pend Oreille River, which comes in in 1954.

Mr. BUDGE. Of those five you have named, what is the total load which you will have to meet in the near future?

Dr. RAVER. The Wenatchee plant total will be 120,000 kilowatts firm in 1957. The nickel load will be 65,000 kilowatts of firm in 1955. The Harvey plant will be 40,000 kilowatts firm in the spring of 1955. The Anaconda load is 110,000 kilowatts of firm beginning this fall, finally firmed up in 1955. You said there were five. There are only four, I believe.

Mr. DITTMER. That is 111,000 instead of 110,000.

Dr. RAVER. Three hundred and thirty-six thousand kilowatts by 1957, beginning most of it in 1954.

Mr. BUDGE. How big an increase are you going to have in that period of time from the projects now under construction?

Dr. RAVER. About 2 million kilowatts.

SCOPE OF BONNEVILLE POWER ADMINISTRATION ACTIVITIES

Mr. BUDGE. Now, we have had quite a lot of discussion not only before this committee but all over the United States about our great dams in the West. There is no question about the contribution which

they have made to the Nation's economy. But in your agency we have an entirely different concept from the one we have when we are talking about the other great dams. They were built, for the most part, for irrigation. Power was incidental to irrigation. Now we have gone into the concept of setting up your agency not as an agency to construct dams for irrigation and to generate power incidental to the irrigation and to dispose of that power at the dam site, the way it is done at the Hoover Dam, but we have in your agency a distribution agency which is just spreading out in all directions from the center. I think we should make a distinction. We should not put this operation in the same category as the Hoover Dam. This is a second step after the building of the dam.

Dr. RAVER. I think that is correct, Congressman. I quite agree with that observation. All I do is look at the Bonneville Act under which we are operating.

Mr. BUDGE. I know you have a feeling that it is your responsibility as a distribution agency to sail off into all four corners up there and to furnish power to anybody who wants power in the Northwest.

Dr. RAVER. I do not say that is my feeling. I merely say that is what the act demands and requires and directs me to do.

Mr. BUDGE. I do not so read the act that the Federal Government has the responsibility to transport the power into Idaho, nor do I read in the act anything that says we have to take it down to this new nickel plant.

Dr. RAVER. I agree you will not find any specific location indicated in the act, but I point out to you what is the policy of Congress under this act. Under section 2 (b) for example—and this is not the only section—it says:

> In order to encourage the widest possible use of all electric energy that can be generated and marketed and to provide reasonable outlets therefor and to prevent the monopolization thereof by limited groups the Administrator is authorized and directed—

It does not say he may do this if he feels like it—

> to provide, construct, operate, maintain, and improve such electric transmission lines and substations and facilities and structures appurtenant thereto as he finds necessary, desirable, or appropriate for the purpose of transmitting electric energy available for sale from the Bonneville project.

And that has been expanded to include all of these other projects, such as McNary, and so forth.

Mr. BUDGE. Your interpretation, then, would be that if Bonneville Power Administration had sufficient power it would be your duty, as directed by Congress, to transmit it, say, even to the Mississippi River or to the State of Pennsylvania?

Dr. RAVER. No; I certainly do not.

Mr. BUDGE. Why?

Dr. RAVER. It says:

> To existing and potential markets and for the purpose of interchange of electric energy to interconnect the Bonneville project with other Federal projects and publicly-owned power systems now or hereafter constructed.

Mr. BUDGE. If you feel constrained to take it to Idaho, why do you not feel constrained to take it to the State of Pennsylvania if the State of Pennsylvania is a potential customer?

Dr. RAVER. Because it is limited to economic transmission distances. The whole question of reasonableness is inherent in everything

in this act. We have to pay for it. Furthermore, we have to cover the costs. There are obvious limitations on what we can do under this act. The Administrator is circumscribed quite frequently on that when it comes down to the economics of the question.

Mr. BUDGE. I think that distinction should be kept in mind all of the time, that this proposition is a second step after the building of the dam and is in many ways unique in the United States.

Dr. RAVER. I think that is true.

Mr. BUDGE. Now, you have indicated a number of reductions in these transmission facilities. We had items 118 and 119. I assume that you will furnish the committee with the other specific reductions.

Dr. RAVER. They were given to the reporter here; yes.

Mr. JENSEN. They were included in the record.

Mr. BUDGE. Are any of those reductions permanent, or are all of them merely a matter of deferring construction?

Dr. RAVER. Some of them are merely deferred, Congressman, I am quite sure. I do not remember which ones.

Mr. BUDGE. Could you indicate by number any that might be permanent deletions?

Dr. RAVER. I can do that. Would it be all right to do it in connection with the record we have submitted?

Mr. BUDGE. Yes.

Dr. RAVER. All right. We will do that.

(The matter referred to follows:)

The reduction of $2,671,000 in the Administration's 1954 fund requirements represents either savings in project costs or deferrals of certain project activities to a later year. Project cost savings amount to $727,000, and program deferrals to $1,944,000, as shown in the following summary:

Budget item	Description	Total Cut	Permanent Savings	Deferrals
118	McNary-Ross	230	230	
119	Southeast Portland area service	557	289	268
148	Hot Springs Spokane No. 1	196		196
214	Quinault service	56		56
232	Columbia Basin service	195		195
305	J. D. Ross substation additions	295		295
325	Tillamook service	330		330
624	Ferry County service	215		215
705	Benton County service	49		49
810	General structures	292	141	151
820	Communications facilities	100	67	33
830	Tools and equipment	100		100
860	Warehouse stock	56		56
	Total	2,671	727	1,944

ADVANCE PLANNING

Mr. BUDGE. I wish you would explain to the committee just a little bit about how your advance planning works out relative to the different phases that you anticipate Bonneville Power Administration will go through in the next 20 or 30 years, and what the Government's responsibility is there, as you understand it, from the act.

Dr. RAVER. Well, our responsibility will depend on what Congress does with respect to additional Federal projects in the region. Assuming that our responsibility remains as it is, Congressman—and certainly Congress can change it any time it decides to do it—I would assume that we would continue to develop the transmission grid system

to tie these various Federal projects together so as to get the maximum benefits of integration, which is one of the great contributions that we are making to everybody in the region out there and which distinguishes, incidentally, the development in the Northwest from the Hoover Dam. Now you do not have an integrated grid system developed out of Hoover. Everybody who wants power comes to the dam, or at least there is more than one agency getting power from that dam.

Mr. BUDGE. Yes.

Dr. RAVER. Instead of having it a part of a grid system which one agency builds and then gives power to everybody from it.

Mr. BUDGE. Of course, we have the public agencies purchasing there as well as private agencies.

Dr. RAVER. That is right. But there is no concept of an integrated grid system in connection with Hoover Dam, at least so far as I know, whereas in our development of the Columbia Basin we are following a basic pattern of building these transmission lines to interconnect with other Federal projects as provided in this section 2 (b). The economies of doing that are very great. Regardless of who owns this grid system, whether the Federal Government owns it or whether they turn it over to somebody else, I am quite sure that under no circumstances would anybody who knows anything about the operation of this grid system, whether it is a private utility company or a public agency or a Federal agency, desire to see the grid system broken up into pieces, part of it taken by one group and part of it taken by another, and destroy in any way one of the great economic advantages that is coming to everyone in the grid of utilizing the pool, you see.

REGIONAL AGENCY FOR OPERATION OF BONNEVILLE SYSTEM

Mr. BUDGE. I can appreciate the advantages of that. It seems to me I also noted, if you were correctly quoted in the press, that you favored the Federal Government giving up this distribution system.

Dr. RAVER. Well, may I state what I did say? I recommended that the possibility of setting up a regional agency outside the Federal Government should be carefully studied. One of the reasons that I thought it should be studied, Congressman, is the one that you raise, as to whether or not we have the responsibility for doing these things or not, because I am convinced that the basic economic future of that region depends on somebody having that responsibility and being able to carry it out.

Mr. BUDGE. With that I wholeheartedly agree.

Dr. RAVER. I would be glad to submit the total of what I actually said before the Bonneville Regional Advisory Council meeting in Seattle on that subject, if you are interested in it. I am not criticizing the press, you understand.

Mr. JENSEN. Without objection, I think that statement should go in.

Mr. BUDGE. I would like to read it in its entirety. All I got was the press release.

Mr. JENSEN. All right. We will include it.

Dr. RAVER. May I say for the record in connection with the submitting of this statement that this was not a prepared statement I made there. I made this from the floor right off the cuff. Con-

sequently, it is not a complete analysis of the problem, but it indicates the kind of things that I think need to be studied about our whole development up there.

(The document is as follows:)

TEXT OF DR. RAVER'S STATEMENT TO ADVISORY COUNCIL ON REGIONAL ORGANIZATIONAL PLANS FOR BPA

I am afraid this is more than a question or a point. I would like to make a suggestion to the research committee of the advisory council that has been doing a very remarkable job in analyzing the possibilities of using revenue bonds as a method of financing this power program. There have been a couple of points raised here in this discussion about revenue bonds which I think go to the heart of the problem. One of them was raised by Mr. McKee when he asked the question as to whether or not private bankers would buy revenue bonds predicated on a market forecast rather than guaranteed by the Federal Government. That merely points up the fact that the real subsidy in the Federal Government program thus far has been the carrying of that risk of a market on a tremendous investment made before you are sure you have the market, and that is what the Government is doing through the appropriation process. National emergencies of one kind or another have been responsible for much of the financing already done under the existing appropriation process. I agree with Mr. McKee that I do not think the private bankers would carry the risk in the manner in which the Federal Government has been carrying it.

Mr. Shefelman made the other point which I think ties in with the one Mr. McKee made. The suggestion which I now make for your study is that you give consideration to an organization with full powers to do the financing on a public utility responsibility basis and make the kind of contracts that will make it possible to borrow the money. Even that has its limitations in this picture in a regional program involving multipurpose dams when it takes 5 or 6 years to build the big projects. It is difficult to make firm power contracts that far in advance of completion of a large dam. You may be able to contract for the generators as they come in, but you still have the problem of carrying a large investment without prime power contracts guaranteed to cover that investment.

I would like to refer to the committee a suggestion for exploratory purposes and see if they cannot come up with a solution to satisfy these problems. It involves organization as well as finance because, when it comes down to the basic issue, I do not think you can differentiate the two problems. I would like to suggest that they consider a power business of the Northwest completely out of the hands of the Federal Government and place it in the hands of a regional board, either elected or appointed by the Governors of the several States involved, and that the board be given the necessary power to build the dams and finance them in all their aspects, including navigation, flood control, so far as the dams are concerned.

The nonreimbursable aspects (navigation locks, etc.) could be handled by a contractual agreement with the proper agencies of the Federal Government. It would be nothing but a power agency and would be set up to do a power business. Reclamation could still be done by the Reclamation Bureau. Navigation can still be operated by the Army engineers, and they might still exercise their constitutional prerogatives, if they have them, over flood control to see that the reservoirs are operated in accordance with a plan of controlling floods. In fact, these agencies could still build the dams under contractual arrangements with the regional board and after congressional authorization. But the agency would issue revenue bonds for each element in the total regional project that it wanted to build, and the board itself would be the regional representative for this region to determine where and when they should be built and secure congressional authorization where necessary. Such an agency could deal with the kind of a group Mr. McKee is talking about. If there is a group that wants to put in a dam themselves, they could make a contract with this power agency. Of course, there are many major issues involved, and I wanted to make this suggestion for study by the advisory council. It fits in with the State compact idea. It would be a public agency similar to a municipality in basic concept and not controlled by any private interest. It would require both Federal and State legislation that would fit in with many of the announced objectives of many of the leaders of the region in the public power as well as the private power field and should be handled on a nonpartisan basis. It should not be permitted to interfere with the continuation of the existing appropriation process for the dams now under construc-

tion or new dams to be started, providing there was agreement with the leaders of the region that here was a course of action they wanted to work out, and they would have to have congressional authorization and approval of it.

On the question of how much it would cost to finance this plan under this kind of a proposal and the effect upon our power rates, that is a matter which Mr. Ostrander has been studying. I am making this suggestion now for exploratory purposes only and have asked Mr. Ostrander to proceed and to see what kind of financial plan he could come up with that was workable and salable under a regional agency with adequate power to perform, including working out cooperative arrangements with the Federal Government. Such a regional agency would provide a regional or local voice on every aspect of the program. If you want to undertake this study, I want to make it clear that it is merely an exploratory matter. It is a combination of a lot of thinking by a good many people who have been talking and thinking about it. We have done some work on the legislative aspects of the problem, and Mr. Ostrander's financial analysis is a first guess at the figures. I have been sitting in on many meetings where matters of this kind have been talked about, and it seems to me particularly appropriate to lay some kind of a plan out and take a look at it and see if anything can be done with it. As a matter of fact, I have had a number of discussions with bankers on the financial approaches. I know Mr. Norwood has been concerned about the impact of private financing on power rates, and I have asked Mr. Ostrander if he would analyze the cost, using as a basis the C–2 program already laid out by the Army engineers. This would still be a public power project but with private financing, the same as a municipal corporation.

PERIOD COVERED IN LONG-RANGE PLANNING

Mr. BUDGE. In your projected planning how many years in advance have you gone? I do not mean in the purchase of transformers and things of that kind, but how far ahead have you projected your distribution planning?

Dr. RAVER. Our planning goes on every year. We are always planning 6 years in advance. We have what is known as the 6-year advance program which we will be glad to submit to you.

Mr. BUDGE. When you go through these different phases, I do not recall just how you describe them, you have phase C, and phase C–2, or something of that kind. What is the date of the last phase in that program?

Dr. RAVER. I do not know that there is a fixed date on that, Congressman. We have participated with the Army and the Bureau of Reclamation in the development of that long-range plan.

Mr. BUDGE. What is the approximate date that that terminates?

Dr. RAVER. Oh, I think around 1975, or something of that kind.

Dr. DITMER. On the so-called C–2 items those projects will have been pretty well used up in the middle of this year. Then you go to the next phase, and those are studies in the preliminary phase of planning, and not in the sense of drawing up specific plans where we work with the Army and the Bureau on projects which might be the next ones, not the whole next phase, but you pick out the most likely projects, and then take up the next phase, and you keep on going with it far enough ahead to take care of your needs.

Dr. RAVER. All we can do, Congressman, is lay out the forecasts of what the demands are going to be, and our best estimate of the best way to take care of it and hope somehow or other that it will be taken care of. If Congress approves of them, all right, and if not, there is nothing we can do about it.

Mr. BUDGE. I appreciate that all you can do, and should do, of course, is follow the dictates of the Congress of the United States. In view of the fact that this program, in its present phase entails the

spending of some $4½ billion, by the two agencies, the Corps of Enneers and the Bureau of Reclamation in the Columbia Basin. I think Congress should very definitely spell out to you, and in the near future, just what the responsibility of the Federal Government is going to be, whether it is going to require our furnishing transmission facilities all over that area, or whether that is going to be handled in some other way.

Dr. RAVER. I would just like to point out to you, Congressman, that I am quite sure that $4 billion figure is not all power.

Mr. BUDGE. No; that is the total construction cost.

Dr. RAVER. There is reclamation, irrigation, flood control, and navigation in there.

Mr. BUDGE. Of course, the costs of flood control, navigation, fish and wildlife, and recreation are all charged off, and you do not pay them back when you sell the power.

Dr. RAVER. That is right. The power program is the biggest proportion of that, as I recall.

CURTAILMENT OF SERVICE DURING 1951 AND 1952

Mr. BUDGE. How many days in the calendar year 1952 were you unable to supply the high load industrial plants that are now in your service area? Can you give me the approximate number of days, and then furnish the correct number for the record?

Dr. RAVER. May I do that? I would like to give you an accurate story of that whole situation. How much of that do you want, do you want the amount of the cutbacks, and the surcharge that the private companies assumed? Are you interested in the whole picture?

Mr. BUDGE. Yes; I think I would be, Doctor.

Dr. RAVER. I have that developed here. If you would like to have it in the record it would be the simplest way to handle it.

Mr. BUDGE. It would appear that when you do not have sufficient power out there to serve the industry which is now there that we ought to be somewhat wary about committing ourselves too many years in advance on new industries.

Dr. RAVER. Well, the commitments that we have made to new industries are on the basis of these new power supplies coming in, Congressman, that will eliminate that kind of a situation. It may be that steam will have to be burned again, but that is not anything unusual down in your country or down in Utah to burn steam, and if it has to be burned we have the capacity in the Northwest. There is some question as to who should pay for it, which has been under discussion here recently, but next fall we do not anticipate that there will be a cutback in firm power requirements.

If we have another dry year coming up this fall we will have to cut back our interruptable load.

We have a large block of power which is sold on an interruptable basis, amounting to some 350,000 kilowatts. As a matter of fact, mostly to the aluminum companies, and it is very fortunate that we have a customer who will buy that kind of thing, because otherwise it would just run to waste, and we have made a lot of money out of that power, and those customers know that they sign that kind of a contract which provides that if we run into dry weather that they have to cut back. A lot of them do.

Mr. BUDGE. Now, in the calendar year 1951 those aluminum plants were closed down for quite some time?

Dr. DITMER. No; only for 2 weeks or 16 days.

Dr. RAVER. Yes; about 16 days was all.

Mr. BUDGE. I would like a statement as to how long they were closed down in 1951 and 1952, both of those years.

Dr. RAVER. We will provide that.

Mr. BUDGE. All right.

(The matter referred to follows:)

ANALYSIS OF 1952–53 POWER SITUATION IN THE NORTHWEST

In the late summer of 1952–53 streamflows started down quite rapidly. Loads were close to estimates during the first 3 weeks of August but dropped precipitously for the Labor Day holiday and failed to make the usual seasonal recovery. The streamflow situation continued critical and it became necessary to drop 380,000 kilowatts of interruptible industrial load during the week of September 8. This helped the situation somewhat, and loads leveled out due to above-normal temperatures. Under continued minimum streamflow conditions it further became necessary to curtail 110,000 kilowatts of firm load on November 17. This curtailment was handled under the EO–4A order of the Defense Electric Power Administration. In addition to the mandatory load curtailment, some important reductions due to voluntary curtailment were realized but the magnitude of the voluntary reductions cannot be accurately estimated. It is believed, however, that they may have been substantial. Fortunately, loads continued below estimates and the usual seasonal increase of loads immediately following the Christmas holidays did not materialize.

Starting in the first week in January, streamflows increased rapidly and during the next 3 weeks generation from streamflow increased 1,600,000 kilowatts in the western group pool. Reservoirs west of the Cascades started filling and by the end of the month, all west slope reservoirs except Ross were spilling. The reaction to the change in weather conditions was slower east of the Cascades and it was not until the end of January that important effects were realized. By the end of that month, Coeur d' Alene had filled and storage was increased above rule curves at Hungry Horse, Flathead Lake, Kootenay, and Grand Coulee. As a result of the rapid improvement in streamflow generation, firm load curtailment was lifted by DEPA on January 13 and 3 days later, on January 16, interruptible load was permitted to return as fast as crews could be assembled and operations could be planned. At the present time, all firm and interruptible loads are being served. Interruptible industrial loads were curtailed from 2 to 4 months in 1952–53 as compared with only 16 days in the fall of 1951, from September 18 to October 4, 1951.

Present power situation analyses show that all firm and interruptible energy loads can be served throughout the balance of the drawdown period even if minimum streamflow conditions should prevail. This can be accomplished with minimum use of steam-electric generation and only minor use of miscellaneous purchases and import from the eastern group utilities.

Except for the Yale plant of the Pacific Power & Light Co., and short-time outages of some of the steam plants, all generating and transmission facilities held up well throughout the critical period. Yale unit No. 1 of 54,000 kilowatts capacity was scheduled to come into operation in November 1952 but actually came into operation December 3. The unit was removed from service on December 16 due to a breakdown outage. The company announced that Yale unit No. 2 would be ready for operation about January 18 but this unit has not operated because of the difficulties encountered with unit No. 1. The plant is still not operating as of March 16, 1953.

POWER RATES APPROVED BY FEDERAL POWER COMMISSION

Mr. BUDGE. How long has it been since you have gone before the Federal Power Commission for approval of your rate structure?

Dr. RAVER. Well, we are before them for changes in the rate structure practically every year, but not basic changes, merely changes in some provision or other, they are technical in character. We have

not asked for any new basic rate structures for a number of years. Do you recall any, Dr. Dittmer?

Dr. DITTMER. We have not asked for any basic changes in the rates at all. Under the act we are required to review these rates every 5 years, and that is all Dr. Raver is talking about is the next review, at which time the subject is given full study. At the end of the previous 5-year period our revenues were such that no fundamental changes were required, and the same rates were kept on.

Dr. RAVER. The only question that has been raised in the past on that, outside of this committee, where it quite properly has been raised, has been on the part of our auditors, who felt that we were making so much money that we ought to reduce the rates.

Mr. BUDGE. Has the Federal Power Commission made any reexamination of your rates in recent years either at their instance, or yours?

Dr. RAVER. I do not think so. Have they, Dr. Dittmer?

Dr. DITTMER. No; no fundamental change, although whenever we make a rate change it must be submitted to them, and we supply them with whatever information they ask for in connection with that change, which does involve more or less the whole problem of rate levels.

Mr. BUDGE. Do all of the rates which you charge now have specific Federal Power Commission approval?

Dr. DITTMER. Yes, indeed they do have.

EFFECT OF INDUSTRIAL LOAD ON RATES

Mr. BUDGE. Doctor, what would be the future of the Bonneville Power Administration if these high-load companies which are customers of yours should shut down?

Dr. RAVER. It would be a very serious matter for our revenues.

Mr. BUDGE. As a matter of fact, you would be a defunct business, would you not, with the amount of power that is going to the aluminum plants and to the nickel plants?

Dr. RAVER. Well, we would have to make some adjustments in our rates to other customers.

Mr. BUDGE. You would have a very acute surplus of power, would you not?

Dr. RAVER. Yes.

Dr. DITTMER. Could I add, Dr. Raver, that these supplies of power are under long-term contracts with companies of very good financial standing, and that they are required to pay for the power whether it is actually used or not, with the exception of certain stated amounts of it which they can cut back and on it get a reduction in their rate, but they cannot close down and the Federal Government get nothing.

Mr. BUDGE. A very large percentage of your power is taken by industry?

Dr. RAVER. I think that is true of every utility company. About 50 percent of all of the private utility business in the Nation is with industrial users.

Mr. BUDGE. I do not think that there is a utility company that has as high an industrial percentage as the Bonneville Power Administration has. How many customers do you have; what is your total number of customers?

Dr. RAVER. We have 119 customers.

Mr. BUDGE. That is a lot fewer customers than most companies have. Of course, there is no private utility of your size, but that is a much smaller number of customers than any other utility company in the country that I have heard of has.

Dr. RAVER. I agree with you that we have a lot of our eggs in the aluminum basket. It is in one type of industry, but as far as the industrial load is concerned, the utilities of the country have about 50 percent of their eggs in the industrial basket and only 50 percent in the residential, commercial, and small consumers field. So, they have a problem of that kind also.

I remember very well in the depression of 1932 when I was in the utility business, to a certain extent, at least, and knew something about it, that the residential and commercial business is what saved the financial structures of most of the utility companies of the country because all of the industries were shut down despite their contracts, and some of the contracts were with very good companies, as Dr. Dittmer has mentioned here, but they simply shut down, and that is all there was to it.

Mr. BUDGE. This committee has been hearing some very interesting testimony from other agencies about the development of new metals, and I can see where this would really be a very serious problem if this one particular industry, the aluminum industry, were to curtail its activities very substantially.

Dr. RAVER. I would suggest that, if you have any concern about it, Congressman, you discuss it with the aluminum people. I do not think you will find that they are pessimistic about their own business. Even with the production of these new metals, the aluminum business is expanding more rapidly in peacetime products of one kind or another than almost any other business in the country.

BAKER-LA GRANDE LINE

Mr. BUDGE. Do you have any item in here for the Baker-La Grande transmission line?

Dr. RAVER. No, but I think we should have. We have not been able to get an agreement with the Idaho Power Co. on an interconnection. If our proposal for that interconnection had been approved, we would have reduced the cutback of industry in the Northwest and also the number of men who were thrown out of work during this dry spell by getting 100,000 kilowatts of steam power from Utah.

OFFICE SPACE IN PORTLAND

Mr. BUDGE. In what portion of the budget do you get your money to pay for leasing of your office space? Where does that show up in this budget, or is that under the General Services Administration?

Mr. GOLDHAMMER. That is in the General Services Administration budget.

Dr. RAVER. But we have to pay for it. It is in our budget, too.

Mr. GOLDHAMMER. Yes; it is imputed in our cost picture, but we do not release the funds ourselves, Mr. Congressman.

Mr. OSTRANDER. Yes; that is right. Even though our rentals on our office buildings are not paid from our appropriation but are paid

from the appropriations which are made to the General Services Administration, we include those costs in our accounts and pay them back to the Treasury in actual cash reciepts.

Mr. BUDGE. And that would be shown someplace in your own expenses?

Mr. OSTRANDER. Yes; in our expenses or overhead. It is charged to construction costs or expenses, for instance, just as though it was paid from our appropriation, and it is just like interest. We do not pay interest from our appropriation, but we reimburse the Treasury for interest cost.

Mr. BUDGE. I am not as much concerned about your new quarters as I am about what is going to happen to your old ones when you get the entire Department of the Interior out there in Portland into the new building.

Dr. RAVER. The Department of the Interior people, the Bureau of Land Management, the Geological Survey, the Fish and Wildlife Service, and all of those agencies that are housed now on Swan Island in Portland in the temporary quarters that were put up there for shipbuilding purposes during the war, have been ordered out of those buildings because the port of Portland has taken over that facility and wants to develop that site for industrial purposes, and when they were ordered out the whole problem of finding blocks of space where people can work together came up. Getting that space was the major problem facing the Interior Department agencies, and we entered into this arrangement with them to occupy our present quarters, providing we could get a new building. So what we are developing there really is a Department of Interior center in which all of the agencies will be in one location.

Mr. BUDGE. Then you will have a regional office for every one of them.

Off the record.

(Discussion off the record.)

OPERATION AND MAINTENANCE

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$5,592,439	$6,600,000	$7,400,000
Unobligated balance, estimated savings	−92,087		
Obligations incurred	5,500,352	6,600,000	7,400,000

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
1. Maintenance of transmission system	$2,151,799	$2,768,590	$3,082,186
2. Operation of transmission system	1,655,137	1,954,202	2,289,408
3. Power marketing	617,715	700,135	777,269
4. General administration	1,075,701	1,177,073	1,251,137
Obligations incurred	5,500,352	6,600,000	7,400,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	886	983	1,113
Full-time equivalent of all other positions	19	41	33
Average number of all employees	811	962	1,088
Average salaries and grades:			
General schedule grades:			
Average salary	$4,529	$4,801	$4,873
Average grade	GS-6.8	GS-7.4	GS-7.5
Crafts, protective, and custodial grades:			
Average salary	$3,054	$3,192	$3,233
Average grade	CPC-4.4	CPC-4.5	CPC-4.5
Ungraded positions: Average salary	$4,725	$4,821	$4,833
01 Personal services:			
Permanent positions	$3,778,206	$4,629,374	$5,335,621
Part-time and temporary positions	78,523	141,971	116,846
Regular pay in excess of 52-week base	9,976	12,000	13,000
Payment above basic rates	148,735	200,570	278,209
Excess of annual leave earned over leave taken	114,285	37,000	28,980
Total personal services	4,129,815	5,020,915	5,772,656
02 Travel	195,025	240,100	252,900
03 Transportation of things	25,010	17,000	17,000
04 Communication services	100,752	102,600	128,000
05 Rents and utility services	39,730	53,200	71,300
06 Printing and reproduction	6,767	11,400	12,100
07 Other contractual services	417,482	318,000	227,400
Services performed by other accounts	306,734	478,800	503,800
08 Supplies and materials	255,582	308,785	365,644
11 Grants, subsidies, and contributions	28,379	49,000	49,000
13 Refunds, awards, and indemnities	519	200	200
Subtotal	5,505,795	6,600,000	7,400,000
Deduct charges for quarters and subsistence	5,443		
Obligations incurred	5,500,352	6,600,000	7,400,000

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$238,227	$406,616	$306,616
Obligations incurred during the year	5,500,352	6,600,000	7,400,000
	5,738,579	7,006,616	7,706,616
Deduct:			
Unliquidated obligations, end of year	406,616	306,616	306,616
Adjustment in obligations of prior years	2,373		
Total expenditures	5,329,590	6,700,000	7,400,000
Expenditures are distributed as follows:			
Out of current authorizations	5,121,996	6,335,000	7,125,000
Out of prior authorizations	207,594	365,000	275,000

NUMBER AND FUNCTIONS OF AREA OFFICES

Mr. JENSEN. Doctor, I have some questions here to ask you as we go into operation and maintenance, and general administration.

You may have to get some information to answer these questions, which you may include when you revise your remarks in the transcript.

Dr. RAVER. Yes.

Mr. JENSEN. A couple of years ago the Bonneville Power Administration established service and district offices and decentralized its operations for the purpose of increasing service to its customers, but in view of the limited number of customers was this warranted? I understand you have at the present time 119 customers, and I believe you expect 10 or 14 more during the fiscal year 1954, do you not?

Dr. RAVER. Yes.

Mr. JENSEN. Did this actually increase the service, or do the customers have to go to Portland whenever a matter is really important?

Dr. RAVER. Well, the decentralization program, which we put into effect a year ago last February, was the result of a long-period study of organization, for the purpose of not only rendering better and more effective service to the customers but for doing our maintenance and operating work on our transmission system and customer facilities more effectively as the transmission system has grown in area. After all, we cover an area now of about 200,000 square miles, and the number of customers we have really does not reflect the amount of business that is done because every one of those customers may serve thousands of people in his area.

Mr. BUDGE. No; not every one, Doctor. The aluminum companies, for example.

Dr. RAVER. I am talking about the distribution customers which are primarily involved in this. There are only 5 or 6 of the private utility companies, and many hundreds of thousands of customers or people served, and they depend on our service to a greater or less extent for their own service, as well as a little REA away out in the country someplace.

Mr. BUDGE. I was objecting to the words, all of them.

Dr. RAVER. Well, you are correct. The problem that was growing on us was really a matter of managerial efficiency. You begin to build up hierarchies inside of a central organization and every little thing that comes in from the field has to go through a certain channel, and what we have done is decentralize our management basically into four major areas which were very carefully studied as to what should be included in each area.

Whereas before that time I think we had seven district offices, they were all consolidated into four areas with a major headquarters in each area.

The maintenance people were put out into those headquarters. Instead of being run from the central office they are now operated from those areas, as well as the operations people.

You can operate the major grid system from your central dispatching headquarters and the microwave system, too, but on the fringes you need the local operation facilities.

Now, this decentralization program has only been in effect for about a year.

I can give you some of the results of the first year of operation. I am not too well satisfied with them yet. I do not think that we have accomplished everything yet that we started out to do in this area-management setup. Part of it has been due to training our people on the responsibilities that they have, but basically the idea back of it, Mr. Chairman, is that we in the central office will set the standards and the policies and the area offices will carry them out instead of having to run in to us for every decision they want to make.

Mr. JENSEN. Well, now, Dr. Raver, that is fine if you will give the manager of the area office authority to decide questions.

Dr. RAVER. I agree with you 100 percent that he has to have it. Otherwise it does not work.

Mr. JENSEN. And authority to run the place without coming to you every time some little problem springs up.

Dr. RAVER. I can assure you that is the way I am running it. They have to stand on their own feet. We have to have managers there who are competent to understand this business, and they make the decisions.

As I say, it has not developed during the first year as satisfactorily as I am sure it will later, but it is an evolutionary process. I think it is a major change in the right direction.

Mr. JENSEN. How many offices do you have?

Dr. RAVER. We have four main area offices.

Mr. JENSEN. You call them area offices?

Dr. RAVER. That is right.

Now, we have an area office at Spokane, an area office at Seattle, an area office at Eugene, Oreg., which includes the Portland area, and an area office at Walla Walla, Wash.

Those are the four main areas, and the areas are shown on this map.

This is the Spokane area [indicating on map]. This is southeastern, the Walla Walla area [indicating]. This is the southwest or the Eugene area [indicating] from here to here, and this is the Seattle area.

Now, the division lines in those areas were determined very largely on the amount of business and transmission facilities to be maintained that existed in each area or are programed for that area.

In addition to that, we have some small offices in those areas that report to the area manager.

We have one at Wenatchee, which is under the Seattle office and operates some of those major transmission facilities in that area. That is a small office.

We have one over at Kalispell, Mont., because this whole development in here is pretty far removed from the Spokane area office. It is under the Spokane manager, but we have a so-called district manager at Kalispell.

Then we have a district manager over at Vancouver, across the river from Portland because of the tremendous amount of business in the Portland area, whereas the central office of this area is at Eugene. That is the total of those offices.

MANAGEMENT IMPROVEMENT ACCOMPLISHMENTS

I would like to submit for the record, if you will permit me to, Mr. Chairman, a statement of the performances of those offices and some of the accomplishments that have been made in our administration in the year that they have been in effect.

Mr. JENSEN. How voluminous will your statement be?

Dr. RAVER. It is five paragraphs.

Mr. JENSEN. All right; include it in the record.

(The matter referred to is as follows:)

MANAGEMENT IMPROVEMENT ACCOMPLISHMENTS

AREA OFFICES

Area offices in four cities have been operating for 1 year. Each area office is developing its own management program, and some measure of success is clearly evident. The area organization has been the primary factor in the following improvements in the Administration's management.

(*a*) Responsibility for budgeting and personnel activities has been placed at the area level in order to bring cost-consciousness and better cost control and manpower utilization to the working levels of the organization. As a continuing part of this effort, improved standards for operation and maintenance are being

developed by the joint effort of the central and area office staffs. Steps are being taken to make available immediately to field supervisors cost and work-performance information so that they can evaluate and report upon their work performance in simple cost and performance terms.

(*b*) Direct work with customers has been simplified through the compilation and issuance of policies covering customer service plans. In addition, the work of customers in assisting the Administration in getting necessary load estimates has been simplified through a revision of the load-estimating manual now available to customers. The Administration's own work in this area has been simplified through a new machine-tabulation method which saves 48 man-months of clerical time. An agreement with the REA has been worked out which coordinates the work of the two agencies on load estimating, and eliminates duplication.

(c) Responsibility for making certain minor capital additions to the Administration's facilities has been delegated to the field organization. This will simplify and expedite the handling of minor construction activities.

(d) Labor-management committees in each area are providing closer and better relations between management and labor. Area meetings with customers provide a basis for better understanding of mutual problems and responsibilities. Area safety councils and supervisors are bringing essential safety matters closer to field supervisors and other employees.

(e) Preparation of wholesale power bills and resale rate analyses for nearly all public agency and small industrial customers has been delegated to the areas. This is enabling the Administration to bill its customers more promptly and to iron out any billing problems more readily. We are also able to obtain information on the resale rate activities of customers more easily.

PERSONNEL

NUMBER OF EMPLOYEES IN AREA OFFICES

Mr. JENSEN. How many so-called office employees do you have in those four area offices?

Dr. RAVER. Very well. May I ask what you mean by office employees, Mr. Chairman? We have operation people and maintenance people.

Mr. JENSEN. I do not mean your maintenance people. I mean your office people. I want the maintenance people also, by the way.

Dr. RAVER. We can give you the whole area organization setup by class of employees.

Mr. JENSEN. All right, both of them.

Dr. RAVER. Yes, sir.

(The matter referred to follows:)

Area offices—Number of employees as of Feb. 28, 1953

Function	Northwest area		Southwest area		Northeast area		Southeast area	
	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
Administration and power marketing	38	1	39	2	24	.....	21	.....
Transmission maintenance	41	.....	39	32	34	.....	27	.....
Substation maintenance	29	.....	39	3	19	.....	19	.....
Substation operations and dispatching	70	1	102	.....	17	.....	30	.....
Meter engineering	8	.....	12	.....	8	.....	4	.....
Relay engineering	12	.....	14	.....	8	.....	6	.....
Communications engineering	16	.....	26	.....	4	.....	6	.....
Plant services	.....	.....	.....	.....	38	11	.....	.....
Warehous operations	12	.....	3	.....	8	2	5	.....
Total	226	2	274	37	160	13	117	.....

ADDITIONAL EMPLOYEES FOR 1954

Mr. JENSEN. Now you are asking for more employees in 1954 than you had in the fiscal year 1953 for the entire Bonneville Administration.

Dr. RAVER. I think you will find, Mr. Chairman, that that is primarily for the operation of additional substations and the maintenance of additional transmission lines.

Mr. JENSEN. Have you reduced the number of office employees since this reorganization, since you have established these area offices?

Dr. RAVER. Yes; in the central office.

Mr. JENSEN. Furnish all of the facts pertaining to that question for the record.

Dr. RAVER. The net change since November 1 this year has been 154 employees.

Mr. JENSEN. Net reduction?

Dr. RAVER. Yes, net reduction.

Mr. JENSEN. Are you asking for less office employees in the fiscal year 1954 than you had in the fiscal year 1953?

Mr. GOLDHAMMER. No, Mr. Chairman, we are asking for an increase in some offices.

Mr. JENSEN. You can furnish that for the record. I would like to have a complete explanation of that.

Dr. RAVER. Very well.

(The matter referred to follows:)

1953–54 personnel changes, office and field

	Appropriated, 1953, man-years	Estimated, 1954, man-years	Increase or (decrease)		Explanation of increases
			Office	Field	
Office of Administrator:					
Staff	25.5	23.1	(2.4)	.....	
Mail and records	38.7	36.3	(2.4)	.....	
Washington, D. C., office.	7.0	7.0	.....	.....	
Office of General Counsel	23.8	22.4	(1.4)	.....	
Publications and information.	7.2	8.0	.8	.....	To meet request from public on power program.
Office of Administrative Management.	58.5	54.6	(3.9)	.....	
Division of Power Operations:					
Power manager's office	9.0	9.0	.....	.....	
Customers service staff.	11.0	11.0	.....	.....	
Power requirements	19.0	16.0	(2.4)	.....	
Power resources	21.2	27.8	6.6	.....	Water-control operations for 6-dam system; planning operations for 3 new dams under construction.
Power services	59.2	62.8	3.6	.....	More complex and increased workload in coordinating power dispatching and interconnected power pool system operations.
Division of General Services:					
Office of Chief	10.3	10.6	(.3)	.6	Increased aircraft transportation.
Branch of Supply	222.2	217.3	(2.5)	(2.4)	
Branch of Land	53.9	48.3	(2.0)	(3.6)	
Branch of Plant Services	395.6	379.1	(.2)	(16.3)	
Division of Engineering:					
Chief's Office	25.5	25.0	(.5)	.....	
System engineering studies.	55.8	57.7	1.9	.....	Expansion of A/C Calculating Board to handle larger system.

1953–54 personnel changes, office and field—Continued

	Appropriated, 1953, man-years	Estimated, 1954, man-years	Increase or (decrease)		Explanation of increases
			Office	Field	
Division of Engineering—Continued					
Control and communications	28.6	28.4	(.2)	.....	
Design Chief	11.0	9.0	(2.0)	.....	
Survey and mapping	169.1	126.2	(11.4)	(31.5)	
Transmission design	87.7	83.7	(4.0)	.....	
Substation design	234.4	199.0	(35.4)	.....	
Drafting and graphics	36.5	36.0	(.5)	.....	
Construction Chief	6.8	6.0	(.8)	.....	
Substation construction	381.7	380.0	.....	(1.7)	
Transmission construction	263.1	246.3	(.9)	(15.9)	
Maintenance Branch	37.5	35.5	.....	(2.0)	
Division of Fiscal and Administrative Services:					
Office of controller	5.1	4.5	(.6)	.....	
Finance and accounts	129.1	128.7	(.4)	.....	
Administrative services	65.3	63.5	(1.8)	.....	
General administration	56.5	56.3	(.2)	.....	
Maintenance supervision and clerical	26.9	30.3	3.4	.....	Increased system workload.
System development	5.7	6.5	.8	.....	Increase in joint engineering workload with customers.
Load estimating	8.6	9.2	.6	.....	Increase in joint load estimating with customers.
Rate studies	4.4	5.1	.7	.....	Increase in workload on control of customer resale rates (required under Bonneville Power Administration Act).
Contracts and billing	11.2	10.7	(.5)	.....	
Warehousing	28.0	31.9	.....	3.9	Increased material issues and new warehouse for efficient materials handling.
Shops	49.5	51.8	.....	2.3	Increased field shop equipment repair workload.
District offices	17.0	16.9	.....	(.1)	
Substation maintenance	107.7	116.3	.....	8.6	Expanded system to maintain.
Line maintenance	172.3	169.1	.....	(3.2)	Net decrease: Force account construction. Decrease, 14.3: Maintenance increase, 11.1.
Meter maintenance	36.8	40.5	.....	3.7	Expanded system to maintain.
Relay maintenance	40.1	49.8	.....	9.7	Do.
Communications maintenance	72.4	79.1	.....	6.7	Do.
Operations of substations	227.6	268.6	.....	41.0	Increase in substation in service and substation capacity.
Total	3,364.0	3,305.5	(58.3)	(.2)	

RECONCILIATION WITH THE UNITED STATES BUDGET DOCUMENT

	1953	1954	Difference, increase (+) or decrease (−)
Average number, all employees:			
Operation and maintenance	962	1,088.0	+126.0
Construction	2,402	2,339.0	−63.0
Total per budget	3,364	3,427.0	+63.0
Actual	3,364	3,427.4	+63.4
Decrease per budget review	.....	121.9	−121.9
Revised total	3,364	3,305.5	−58.5

REASON FOR GRADE CLASSIFICATION INCREASE

Mr. BUDGE. Mr. Chairman, could we also have included in that an explanation of why the grade classification has jumped from 6.8 to 7.5 in 2 years.

Mr. JENSEN. Yes, indeed; that would be very interesting.

Dr. RAVER. Do you want it for the record?

Mr. JENSEN. Yes.

Dr. RAVER. Very well.

(The matter referred to follows:)

The increase in the GS average salaries in fiscal year 1954 over fiscal year 1953 primarily results from the obligation to promote professional engineers from the lower grades to what is considered the first working level for a trained professional engineer, GS–9, $5,060 per annum.

To meet the demands of the design and construction program and to service the annual plant additions it was necessary to recruit professional engineers in fiscal year 1951 and fiscal year 1952. In 1951 we hired approximately 140 engineers at the GS–5 grade. In fiscal year 1952 we hired approximately 120 professional engineers at the GS–5 grade. It should be noted, however, that our recruitment during this fiscal year has been limited and new employees have been in the main casual applicants. In fiscal year 1954 we do not plan to recruit engineers, for with the modification in our design and construction activity our plant requirements for such employees can be met through reassignments, and increased use of technicians.

At the time we recruited these blocks of engineers in fiscal years 1951 and 1952 the eligibility requirements for promotion as published by the Civil Service Commission had been modified to permit promotion from grade GS–5 to grade GS–9 in a minimum period of 18 months. Under the requirements of Executive Order 10180 and the Whitten amendment such promotions were still permitted, subject to having on file with the Commission an approved training program to substantiate the 18 months' promotion to grade GS–9, the first professional working level for a trained engineer.

Shortly after the effective date of the Whitten amendment early in fiscal year 1952 the Bonneville Power Administration prepared a training plan which was approved by the Civil Service Commission and published to all engineering employees. Consequently, not only were the engineers who were recruited prior to the Whitten amendment in fiscal year 1951 who were eligible for accelerated promotion to GS–9, but as well those engineers recruited after the amendment were offered a similar promotional opportunity based on our approved training agreement. In view of the national shortage of engineers it is impossible today to recruit professionally trained people without offering the maximum promotional benefits permitted by the Civil Service Commission. It is also essential that these promotional commitments be met after the engineer is employed to combat excessive attrition and lowered morale. In view of these circumstances the Bonneville Administration has adhered to the policy of offering and providing for all professional engineers recruited under these terms their maximum accelerated promotion when performance has been satisfactory.

In terms of the 18-month promotional eligibility the engineers recruited in fiscal year 1951 became eligible for grade GS–9 during early fiscal year 1953. Engineers recruited in fiscal year 1952 became eligible for promotion to grade GS–9 in the last part of fiscal year 1953 and fiscal year 1954. This single factor of the promotion of professional engineers to grade GS–9 at $5,060 per annum is sufficient to account for the average grade increase throughout the Administration.

For example, according to our records, as of February 28, 1953, we had 201 employees throughout the Administration in grade GS–11, of which 140, or 69 percent, were professional engineers. Similarly, of 394 employees in grade GS–9, 289, or 71 percent, are professional engineers; and in grade GS–7, of a total of 316 employees, 149, or 47 percent, are professional engineers. The large group at GS–9 were, at the first part of fiscal year 1953, mainly in grade GS–7. Of the group in grade GS–7, at the start of fiscal year 1953, these employees were mainly in grade GS–5. In addition, of the engineers in grade GS–7 at this time, the majority will become eligible for promotion to grade GS–9 during the last part of fiscal year 1953 and during the first few months of fiscal year 1954.

An additional factor which has contributed but to a much lesser degree to the average grade increase is more effective administration of the Classification Act

of 1949. We are currently conducting an organization-wide cyclic classification maintenance program. As we proceed with this we find that although certain demotions are called for, in many positions at the lower levels, such as GS–2 typists and critical occupations such as draftsmen and construction superintendents, an upward grade adjustment is required. The promotions resulting from these audits have become effective during the last part of fiscal year 1952 and will show for the full period of fiscal year 1953.

As a result of the classification program there has also been a clarification of the classification differences between GS–9 and GS–11 engineers. This resulted in the promotion of many GS–9 engineers, who were performing full scope professional engineering work, to GS–11. Most of the promotions resulting from the clarification of engineering classification standards took place in the last half of fiscal year 1952 or the first half of fiscal year 1953.

Although not shown in the budget the within-grade promotions in fiscal year 1953 are a factor which will take place on a routine basis. During fiscal year 1953 approximately 1,200 employees will receive such promotions, with an increase in the average salary for general schedule employees of $60 per annum. This is a factor, of course, which becomes an overhead problem as an organization becomes older and particularly in view of the remarkably low attrition rate with annual employees in the Bonneville Power Administration.

FREQUENCY OF PATROLLING LINES

Mr. JENSEN. It is noted in your report that you patrol your lines every 6 weeks. Is not the practice of other utilities of the area to do this about every 6 months, and if so why is it necessary to patrol your lines oftener than other utilities do?

(The matter referred to follows:)

TRANSMISSION LINE PATROLS

The periodic 6-week inspection patrols refer to patrols by helicopter of the main transmission line of the BPA grid system. Working patrols are ordinarily made at 6-month intervals. The Administration's transmission system welds together and integrates the principal generating and hydro storage plants and load centers of the Northwest. Over its transmission lines the Administration supplies 60 percent of the region's electric power requirements. Its customers include vitally important defense loads, and it is interconnected with numerous distribution agencies, including the Northwest power pool, which in turn serve population centers and essential loads. In short, the Administration's power supply is a key factor in the business and industrial economy of the Northwest.

Because of this dependence on the Administration's transmission network, adequate maintenance of the component lines and substations is necessary to avoid disruption of electric service to its customers and the attendant loss of power service and production throughout the Northwest.

The principal tool for meeting this requirement is an adequate patrol and maintenance program, and the key to the most efficient utilization of funds and manpower is a regular inspection for defects and incipient causes of line outages and damage.

In common with the other electric utilities of the Northwest, the Administration's line patrols must take into account the importance of the lines, the type of terrain traversed, and accessibility. The latter factor is particularly important since lines above the snow line at the higher elevations are very difficult to patrol by usual methods. It is understandable, therefore, that the frequency of patrols by the various utilities ranges from monthly to semiannually, with the latter considerably augmented by plane and vehicle patrols as line outages occur from lightning, pole-top fires, brush fires, and other causes. Patrol techniques also vary from a simple patrol and inspection operation by 2 or 3 men to an annual overhaul by fully manned maintenance crews.

The frequency of the Administration's patrols, 8 by helicopter and 2 working patrols annually, falls within the above pattern of experience. On a comparative-cost basis, the 8 helicopter patrols are equivalent to approximately 4 of the foot or vehicle variety. In addition, the working patrols, which are performed soon after the winter damage period and again in the late fall, combine an inspection of damage not readily discernible by helicopter and the planned repair and replacement of structures and access roads. This overall combination of helicopter and working patrols provides the basic data for the most effective crew utilization, with attendant savings in crew time, travel expense, per diem, and overtime.

ENGINEERING SERVICE PROVIDED TO CUSTOMERS

Mr. JENSEN. My next question is, To what extent is Bonneville furnishing to its customers at Bonneville's expense engineering and other technical service either directly or indirectly that those customers could or should obtain from their own engineering staff or from an established consulting engineering firm?

(The matter referred to follows:)

Dr. RAVER. The Administration does not furnish such services to customers. The work performed with customers may be described as follows:

Facilities required for serving our distributors are jointly planned by BPA and the distributor. The distributors need load estimates for a number of purposes such as rate and revenue analyses, budget preparations, and planning generation, transmission and distribution facilities required to meet expected loads. Load estimates constitute the foundation for planning most electric utility construction and operation activities. BPA-customer joint planning starts with jointly prepared 10-year load forecasts to determine the time, location, and size of loads to be supplied by BPA and distributed by the customer. The distributors are expected to do the basic work in the preparation of these load studies. BPA representatives assist by advice and consult on the work in a practical manner.

The joint BPA-distributor load studies represent agreed future power requirements to be met by BPA and form the basis for plans for serving the increased loads. Costs of facilities under several plans of service are usually considered in order to arrive at the most economical plan of service. Agreement is reached between the distributor and BPA on the plan of service to be recommended.

Proposed customer service budget items represent the part of the total new facilities shown to be needed by the joint BPA-customer studies which it is the Administration's responsibility to provide under its customer service policy. Construction by customers of related new subtransmission and distribution facilities necessary to carry the power from BPA points of delivery to ultimate consumers by the distributor are also agreed upon and scheduled in conjunction with the joint studies. Energization dates required for BPA facilities are matched by these customers' schedules for construction.

ITEMIZED REQUEST FOR 1954

Mr. JENSEN. Put the tables appearing on pages 93, 94, 96, 98, and 101 of the justifications in the record at this point, and also the material appearing on page 8.

(The matter referred to follows:)

The following table summarizes the growth of the transmission system during fiscal years 1953 and 1954:

	Actual June 30, 1952	Estimated June 30, 1953	Estimated June 30, 1954
Value of plant in service	$195,073,212	$247,100,000	$297,046,000
Energy available (megawatt hours) (median water assumed)	18,555,000	19,500,000	21,000,000
Substation capacity (kilovolt amperes) (force cooled)	4,491,084	5,704,584	6,307,584
Substations (number)	134	147	161
Transmission lines (circuit miles)	4,954	5,688	6,483
Microwave communications, stations	8	20	43
Microwave communications, terminal and repeater units	11	50	72
Number of customers	112	119	133
Points of delivery	273	294	323

An analysis by major activities follows.

1. Maintenance of the transmission system, $313,596

Subactivity	Adjusted appropriation	Decreases, base 1954	Estimate 1954	Increases
(a) Transmission line maintenance	$738,110	−$738,110	$759,169	$21,059
(b) Substation maintenance	678,980	−678,980	747,631	68,651
(c) System protection and control maintenance	792,597	−792,597	976,294	183,697
(d) Access road maintenance	100,422	−100,422	114,510	14,088
(e) Maintenance supervision and standards	237,291	−237,291	256,211	18,920
(f) Maintenance services	221,190	−221,190	228,371	7,181
Total	2,768,590	−2,768,590	3,082,186	313,596

2. Operation of the transmission system, $335,206

Subactivity	Adjusted appropriation	Decreases, base 1954	Estimate 1954	Increases
(a) Power scheduling and dispatching	$215,984	−$215,984	$299,032	$83,048
(b) Substation operations	1,287,772	−1,287,772	1,515,214	227,442
(c) Lease of facilities and purchase of power	178,790	−178,790	158,079	(20,711)
(d) Operation standards and engineering	271,656	−271,656	317,083	45,427
Total	1,954,202	−1,954,202	2,289,408	335,206

3. Power marketing, $77,134

Subactivity	Adjusted appropriation	Decreases, base 1954	Estimate 1954	Increases
(a) System programing	$60,072	−$60,072	$65,851	$5,779
(b) Power contracts, billing, and rate studies	134,432	−134,432	153,256	18,824
(c) Power-requirements studies	272,569	−272,569	293,803	21,234
(d) Power resources	137,583	−137,583	165,225	27,642
(e) Power marketing policy and standards	95,479	−95,479	99,134	3,655
Total	700,135	−700,135	777,269	77,134

4. General administration, $74,064

Subactivity	Adjusted appropriation	Decreases, base 1954	Estimate 1954	Increases
(a) Policy development and program management	$660,075	−$660,075	$695,462	$35,387
(b) Fiscal and administrative services	413,785	−413,785	450,746	36,961
(c) General services	43,647	−54,213	62,949	8,736
(d) Miscellaneous undistributed items	59,566	−49,000	41,980	(7,020)
Total	1,177,073	−1,177,073	1,251,137	74,064

Repayment of Capital Investment

The gross revenues of more than $265 million to June 30, 1952, after deduction of accounts receivable, noncash exchange sales and miscellaneous items, produced during the period cash receipts of $251,845,393 which were returned to the United States Treasury. After payment of all expenses, totaling $128,839,527 for operation, maintenance, interest, etc., these cash receipts left a balance of $123,005,866 for repayment of capital investment of the Government in the dams, power plants, transmission facilities, etc. The gross capital investment of the Federal Government in the amount of $533,863,040 in such capital assets was thus reduced by 23 percent to an unpaid balance of $410,857,174 as of June 30, 1952. The distri-

bution of these capital totals among three projects was as follows, as of June 30, 1952:

Project	Gross power capital investment	Capital repaid		Unamortized balance
		Dollars	Percent	
Bonneville Power Administration	$255,557,049	$67,552,561	26.4	$188,004,488
Bonneville Dam (Corps of Engineers)	59,874,490	18,699,654	31.2	41,174,836
Columbia Basin project (Bureau of Reclamation)	218,431,501	36,753,651	16.8	181,677,850
Total	533,863,040	123,005,866	23.0	410,857,174

The repayment of the power capital investment of the Bonneville Dam project and of the capital investment of the Bonneville Power Administration was well ahead of scheduled requirements as of June 30, 1952. The repayment of the costs of the Columbia Basin project returnable from power revenues was well ahead of original schedules. Ultimately, power revenues will return, in addition to power costs, approximately $400 million of the costs of irrigation at the Columbia Basin project.

PURCHASE OF POWER AND LEASING OF FACILITIES FROM REA'S AND PUD'S

Mr. JENSEN. Do you purchase power from or lease the facilities of any REA?

Dr. RAVER. No.

Mr. JENSEN. Or any PUD?

Dr. RAVER. Do we lease any PUD facilities, Dr. Dittmer?

Dr. DITTMER. No, not in the strict sense of a lease. We do pay them in a few cases where they transfer power over their facilities to a customer of ours, wheeling it to a minor extent.

Dr. RAVER. I think we are leasing some facilities of an REA.

Dr. DITTMER. I thought the question was do we lease them from PUD's.

Mr. JENSEN. My question was do you purchase power from or lease the facilities of any REA's or PUD's.

Mr. OSTRANDER. Do you mean generating facilities. Mr. Chairman?

Mr. JENSEN. Yes, facilities owned by an REA or a PUD.

Dr. DITTMER. Yes.

Dr. RAVER. If we do, do you want us to state what they are?

Mr. JENSEN. Yes, name them.

Dr. DITTMER. And give the facts concerning them?

(The matter referred to follows:)

Following is a list of facilities leased and annual amounts obligated:	*Amount*
West Oregon Electric Cooperative, Warren-Vernonia, 34½ kilovolts	$7,073
West Oregon Electric Cooperative, Booster Bank at Olney	173
Lane County Electric Cooperative, Eugene-Cottage Grove, 33 kilovolts	962
Midstate Electric Cooperative, Redmond-Lapine, 69 kilovolts	25,980
Columbia Basin Electric Cooperative, Hermiston-Ione, 69 kilovolts	18,271
Columbia Power Cooperative, Antelope-Service Creek, 69 kilovolts	33,306
Columbia Power Cooperative, Pilot Rock-Ukiah, 69 kilovolts	20,385
Wasco Electric Cooperative, Maupin-Antelope, 69 kilovolts	10,807
Inland Empire REA, Pomeroy-Jerita, 69 kilovolts	16,032
Ferry County PUD, Nespelem, 12.5 kilovolt line	2,606
Grays Harbor PUD, Aberdeen-Cosmopolis, 115 kilovolt line	[1] No funds
Total	$135,595

[1] BPA operates and maintains this line in lieu of lease payments.

On March 14, 1952, during Coulee flooding, power was purchased from Cowlitz PUD for $9,870 and from Grays Harbor PUD for $560. No other purchases have been made from PUD's since 1948.

Basic reasons for these leases lie in the service policies of the Administration, which are designed fundamentally to provide service where needed at the lowest overall cost and on a basis which will provide the required revenues to pay out project costs in accordance with law, but will not require excessive retail rates. These policies conform to policy statements of the Department of the Interior which are in agreement with the policies developed jointly by the Department and the Bureau of the Budget. Applicable statements in the Administration's plan of service policy are:

"REMOTE RURAL LOAD CENTERS

"Each service must provide sufficient estimated revenues over the initial 10-year period of service to cover the costs to BPA under the lease arrangement.

"LEASE POLICY

"It is BPA's policy to lease facilities under the following situations:

"I. Situations in which existing facilities of adequate capacity are available to handle the load and the use of a lease agreement will avoid the construction of duplicating facilities.

"II. Situations where the timing of the need for new facilities is such that the facilities can be placed in service on the required schedule only by means of a lease agreement (when the regular appropriation process will not permit installation in time). Under this situation it is understood that BPA will plan to terminate the lease agreement as soon as possible by purchase of the facilities in question under the regular appropriation process and BPA's policy regarding the purchase of customer-owned facilities.

"III. Marginal situations in which revenues from the service provided will not be adequate to bear the costs of standard BPA construction, but in which a lease arrangement is economically feasible. (See Remote Rural Load Centers.)"

PERSONNEL

TOTAL PERSONNEL EMPLOYED BY BONNEVILLE POWER ADMINISTRATION

Mr. JENSEN. What is the total number of personnel employed at this time by the Bonneville Power Administration in all branches of your Administration?

Dr. RAVER. On March 1, 1953, it was 3,179.

Mr. JENSEN. How are they assigned by functions?

Dr. RAVER. Well, the only breakdown I have here is between annual and hourly employees; 1,970 were annual, and 1,209 were hourly. We can give you a complete breakdown by functions in each of those categories.

Mr. JENSEN. I would like to have the number employed in operation and maintenance, the number employed in general administration, and also construction. That would include all of them, would it not? Of course, most of your construction is done by contract. You do do some of the small construction work by force account?

Dr. RAVER. That is right.

(The matter referred to is as follows:)

Personnel and man-years, fiscal year 1953, by functions

Organization (function)	Total employment as of Feb. 28, 1953 [1]	Man-years in budget		
		Operation and maintenance	Construction and other [2]	Total
Branch of land	50		53.9	53.9
Survey and mapping	142	2.5	166.6	169.1
Design supervision	10		11.0	11.0
Transmission design	96	.4	87.0	87.4
Substation design	234	2.0	232.4	234.4
Construction supervision	6		6.8	6.8
Transmission construction	234		263.1	263.1
Transmission maintenance:				
Northwest area	41	25.3	29.6	54.9
Southwest area	71	20.3	29.0	49.3
Northeast area	34	16.9	20.4	37.3
Southeast area	27	15.7	15.1	30.8
Brush and weed control	[3]	24.0		24.0
Substation construction	344	2.1	379.6	381.7
Substation maintenance:				
Northwest area	29	25.4	2.1	27.5
Southwest area	42	31.1	10.2	41.3
Northeast area	19	13.3	6.7	20.0
Southeast area	19	15.6	3.3	18.9
Maintenance standards, supervisory and clerical assistance:				
Central office [4]	10	10.1	3.4	13.5
Northwest area	9	7.0	2.0	9.0
Southwest area	11	7.0	3.5	10.5
Northeast area	[3]			[3]
Southeast area	5	3.7	2.0	5.7
Substation operations and dispatching:				
Northwest area	71	74.5		74.5
Southwest area	102	103.3		103.3
Northeast area	17	18.8		18.8
Southeast area	31	31.5		31.5
Central scheduling and dispatching	32	28.5	.4	28.9
Control and communications:				
Northwest area	36	38.0	8.4	46.4
Southwest area	52	44.9	18.6	63.5
Northeast area	20	17.7	4.6	22.3
Southeast area	17	14.5	3.8	18.3
System protection and control standards	29	15.0	13.6	28.6
Plant services:				
Supervision	6		7.2	7.2
Northeast area shops and transportation	51		49.5	49.5
Shops and property maintenance	133	9.0	126.0	135.0
Toolroom	10		12.5	12.5
Transportation and equipment	209	.5	206.4	206.9
Electric laboratory	31	11.0	23.0	34.0
Supply:				
Supervision	6	1.6	5.6	7.2
Materials and contracts	71	2.7	69.3	72.0
Inspection and expediting	54		63.0	63.0
Open-market purchasing and warehousing:				
Central	81		80.0	80.0
Northwest area	12		12.0	12.0
Southwest area	3		4.0	4.0
Northeast area	8		8.0	8.0
Southeast area	5		4.0	4.0
Engineering studies	62	24.0	31.8	55.8
Power marketing and general administration:				
Office of Administrator	23	18.2	7.3	25.5
Mail and Records	37	10.4	28.3	38.7
Publications and Information	7	7.2		7.2
Washington, D. C., office	7	7.0		7.0
Office of General Counsel	23	12.3	11.5	23.8
Office of Administrative Management	60	16.7	41.8	58.5
Northwest area	30	20.0	9.6	29.6
Southwest area	31	25.4	7.6	33.0
Northeast area	24	17.8	9.2	27.0
Southeast area	13	10.7	3.1	13.8
Fiscal and administrative services	193	54.3	145.2	199.5
Supervisor of General Services [5]	9	2.9	7.4	10.3
Office of Power Manager	21	18.4	1.6	20.0
Branch of Power Resources	22	18.6	2.6	21.2
Branch of Power Services	25	30.3		30.3
Branch of Power Requirements	16	17.3	1.7	19.0

See footnotes at end of table, p. 783.

Personnel and man-years, fiscal year 1953, by functions—Continued

Organization (function)	Total employment as of Feb. 28, 1953 [1]	Man-years in budget		
		Operation and maintenance	Construction and other [2]	Total
Office of Chief Engineer	23	4.6	20.9	25.5
Drafting and Graphics	33	12.0	24.5	36.5
Total	3,179	962.0	2,401.7	3,363.7

[1] Includes temporaries, extra board, and consultants.
[2] Includes man-years chargeable to clearing-account activities.
[3] Included in areas doing the work.
[4] Includes helicopter pilots.
[5] Included under regular maintenance and general administration.
[6] Includes passenger airplane pilots.

LIMITATION ON FORCE ACCOUNT EMPLOYMENT

Mr. JENSEN. In order to keep your force account laborers at a higher level do you ever contract for something that force account labor should do in order, so to speak, to give you more force account laborers on the payroll? Do you ever do that?

Dr. RAVER. No. Here is the way we handle that, Mr. Chairman. We are limited, first of all, in the amount of force account work which we can do by a congressional limitation in our appropriation bill which has been in in previous years, at least, to about 12 percent of our total dollars for construction.

Mr. JENSEN. Yes.

Dr. RAVER. Now, we always stay below that 12 percent, but we keep a force account crew and a maintenance crew, and we again hold down on the size of our maintenance crews by using our force account crews both for construction and for maintenance, depending on the season, you see, so we can keep our force account people throughout the year, which is the thing that I think you are interested in, that we do not have them sitting idle when we could have them busy on a force account job.

The way we handle that is we keep them busy either on maintenance or on construction, and we have an agreement with the labor unions that permits us to do that. It is one of the unusual agreements that we have been able to work out with organized labor to get the maximum efficiency out of our employees, so that our maintenance people are not sitting around idle and our construction people are not sitting around idle, and they can be used either for maintenance or construction.

That keeps the size of the crew down to a minimum and gives them full employment the year around, which the labor people like to have, it gives the contractors the maximum amount of work and all in all it works very well.

POWER MARKETING

Mr. JENSEN. Now, your request in this budget is for $777,269 under the power-marketing item.

Under that item you have, for instance, system programing, $65,851, which amounts to $500 average cost per customer for your 133 cus-

tomers that you propose to have in the fiscal year 1954. You also have under the item of power marketing power contracts, billing and rate studies. You are asking for $153,250, which amounts to an average of $1,200 per customer.

Then there is power-requirement studies, $293,803, or an average cost per customer of $2,200.

Then there is the item of power resources, $165,225, or an average cost per customer of $1,250.

Power-marketing policy and standards, $99,134, or an average cost per customer of $750.

You are asking as a total for power marketing, $777,269, or a total average cost per customer of $6,900.

At first glance that would seem to be exorbitant, Dr. Raver. I know you have already explained some of the reasons why this is so, but would you give an explanation for the record?

Dr. RAVER. Yes; I will be glad to.

(The matter referred to is as follows:)

Costs per customer for a wholesale business, such as that of the Bonneville Power Administration, are of doubtful validity and are, in fact, apt to be misleading, if compared with other utility operations. Most utilities are engaged in retail distribution and serve a relatively small amount of power to a large number of customers. On the other hand Bonneville Power Administration carries on one of the largest power operations in the world, but it has relatively few direct customers because most of these customers in turn resell electricity to a large number of their own customers. The cost of our operations is more properly related to the volume of business which we do. One measure would be to determine the percentage of cost as compared to the amount of revenue to be obtained. The estimated revenue for fiscal year 1954 is $45,700,000. The amount of revenue per customer averages $344,000. The power marketing costs of $6,900 per customer, therefore, amounts to only 2 percent of revenues. In this connection I would like to point out that these activities are not sales or marketing activities in the usual sense of the word. They are activities which are necessary in the running of our business and in the administration of contracts with little or nothing expended for direct development of sales.

A better answer, however, can be given by an affirmative statement of the type of activity covered under each of the classes referred in your question and together with your statement of how these activities are necessary in their contribution to the efficient operation of our business.

Power marketing covers that work of the Administration which does not properly qualify as operation maintenance of the electrical transmission system or general administration and includes considerable amounts which are not directly related to serving the Administration's customers.

The number of customers, the number of points of delivery, the amount of revenue derived per customer, the complexities of legal problems in contract drafting, special problems of the customer, or a combination of any of these factors are important considerations, but may not always indicate the volume of work in the power marketing activity. Also since the Administration is engaged in a wholesale business only, and does not have any distribution facilities, no valid method has been found to compare its expenses with other utilities. This is clear from a check of our system facilities and from a comparison of its operation with that of other utilities.

The size of the Administration's customers, and the complexity of the problems in providing service to them vary widely. For example, in fiscal year 1951 the smallest customer, Tanner Mutual Power and Light Association, purchased 243,099 kilowatt-hours for $894 and the largest customer, the Kaiser aluminum reduction plant at Spokane purchased 2,447,028,973 kilowatt-hours for $5,025,972. In addition, the number of points of delivery may vary from 1 to as many as 11.

Considering each subactivity separately, the $65,851 requested for system programing can be measured by the number of plans of service developed and accepted in the fiscal year 1954 budget. In addition, consideration must be given to the large number of plans studied and rejected either for lack of economic feasibility or because service could be deferred or provided through some other means.

Power requirement studies are not comparable to the work of other utilities nor directly related to customers. The main purpose of the requested $153,256 is to permit the Administration to do an adequate advance planning job on its construction program. This long-range programing permits an efficient and economical construction program which meets the long-range planning required by Federal budget procedures. Because the Administration has no power sales program, this subactivity is devoted exclusively to determining, in cooperation with the customers, what the power growth requirements in the region will be.

The sum of $293,803 is requested for power contracts, billing customers for power, and rate studies. The Portland General Electric Co. during fiscal year 1951 incurred costs of $2.24 per kilowatt of maximum demand for this work. (Residential cost cannot be broken out from wholesale or commercial sales.) The Administration during the same year incurred costs of $0.05 per kilowatt of maximum demand (Cost data taken from the Federal Power Commission report for fiscal year 1951.) While these comparisons are reasonably accurate statistically, they illustrate that the type of work involved is not comparable between a wholesale and a distribution utility and the misleading inferences obtained from such comparison. The amount requested for fiscal year 1954 represents a decrease in cost per customer from $2,290 in fiscal year 1953 to $2,209 in fiscal year 1954. As an average cost per customer, this is not a large amount in consideration of the complex billing and contract problems resulting from the operations of the power pool and the Administration's efforts to utilize the facilities of other utilities through transfer or transmission agreements.

The sum of $165,225 requested for power resources has no direct relation to service to a customer. This money is for the operation of the Administration's hydrometeorological network, the planning of additional sources of generation and the preparation of water resources and storage studies. It covers only a minimum program for these purposes.

Power marketing policy and standards cover funds for determination of the overall power sales and operation program of the Administration. This is closely related to the operations of the northwest power pool, power curtailment (when applicable) and the general management problems of a complex operating system. In addition, the requested amount of $99,134 includes the necessary secretarial services and the budgeting and personnel work covering the five subactivities constituting the power marketing activity.

In general the following work may be reasonably allocated on the basis of the number of customers:

System programing	$65, 851
Power contracts, billing, and rate studies	293, 803
The load estimating portion of power requirement studies	58, 152
Total	417, 806

This is an average cost of $3,141 per customer which is a reduction of $68 per customer from the average costs of fiscal year 1953.

GENERAL ADMINISTRATION

Mr. JENSEN. All right. We come now to the item of general administration. You are asking, under that heading, $695,462 for policy development and program management, or an average cost per customer of $5,200.

Fiscal and administrative services, $450,746, or an average cost per customer of $3,350.

General services, $62,949, or an average cost per customer of $450.

Miscellaneous undistributed items, $41,980, or an average cost per customer of $300.

The total average cost per customer, exclusive of operation and maintenance, is $16,200.

Now, it would appear to me that is going to require some pretty thorough explanation. I hope that you can justify it.

Dr. RAVER. May I point that on a customer basis our interest cost is $76,080 per customer. I will be glad to answer.

I question whether the per customer basis is the basis for determining this problem. Maybe it is in other kinds of situations. There are customers that pay us $4,000,000 or $5,000,000 a year and some pay us $4,000 or $5,000.

(The matter referred to is as follows:)

GENERAL ADMINISTRATION

This activity consists of expenses which relate to the overall operation of the Administration and with those services which are required to operate a program of the size and nature of the Bonneville Power Administration. An attempt to relate these expenses to the number of customers would give no indication of the true value and need for this work. The functions performed in this category of activities consist of overall direction and management of the Administration's operation and maintenance program, such as executive direction, area management, legal, information and reports, engineering direction and supervision, and administrative, personnel, and budget management; fiscal and administrative services, such as accounting services and financial analyses, administrative and office services, general drafting work, mail and records, teletypes and telegrams, the Portland garage service, and social security and unemployment compensation costs; general services such as stores expenses, procurement and other miscellaneous services; and miscellaneous undistributed items such as leave accrual and extra day pay which would be less meaningful if directly allocated in the budget to the direct work accounts to which they are ultimately assigned in the allocation of charges. It will be noted that these functions could almost, in their entirety, be allocated to the direct system maintenance, operations, and power marketing functions and the workload is directly the result of the level at which these systems and marketing activities are conducted. Specifically, this activity consists of the following:

A. POLICY DEVELOPMENT AND PROGRAM MANAGEMENT

The requirements for policy development and program management are primarily determined by the expanding power program of the Federal Government in the Pacific Northwest. One hundred and thirty-five thousand one hundred and twenty-seven dollars of the total estimated $695,462 will be for the executive direction of the Bonneville Power Administration, which includes the Administrator's immediate office and those staff offices under his immediate direction which handle the complicated relationships with other agencies, such as the Corps of Engineers, Bureau of Reclamation, and other Federal, State, and local governmental activities. The necessity for these staff groups lies in the fact that the Administration's activities are bound up with the programs and objectives of nearly all the other governmental agencies and units operating in the region and must be coordinated with them. This staff aids in the formulation of Administration policy and programs, coordinates the offices and divisions in the execution of Administration policies, and performs special assignments on specific problems facing the Administration.

In the original estimates, a total of $48,325 was included for the Washington liaison office. This office performs liaison functions between the Administration and other departmental activities, and also assists the Administrator in maintaining relationships with the Bureau of the Budget, congressional committees, General Accounting Office, Federal Power Commission, Civil Service Commission, and similar executive management agencies.

Management staffs of the area offices will require an estimate of $275,134. These offices represent the Administrator in the area and are responsible for the management of area work. The costs include preparation of the budget and maintenance of budgetary allotment controls in the field, personnel requirements and administrative services in the field, and supervision of field maintenance, operations and marketing activities. The area management staff, in addition to its administrative responsibilities, must supervise the actual operation and maintenance of the transmission system in the field. This includes the regular and emergency maintenance activities, the operation and maintenance of controls and communication facilities, which involves the metering and relay systems as well as the communication facilities, the day-to-day handling of the operation of the system including subdispatching of power to customers, the preparation of customers' bills, the negotiation of contractual service relations with customers and many other practical day-to-day business dealings with the customers.

The administrative management activity consists of major staff management functions of budget, personnel, and management research. The total estimates for operation and maintenance for these activities in the budget document were as follows:

Management office	$7,038
Budget management	18,189
Personnel management	62,268
Management research	14,732

The Office of the Director of Administrative Management coordinates the work of the component offices and provides liaison with top staff on management program activities as a whole. He coordinates management programing with current policies of the Administration and programs being carried forward with other parts of the Administration, problems for immediate attention or the improvement of methods for work measurement, participation in studies of financial and other management reporting to facilitate management control, and improvement of personnel utilization with particular reference to engineering skills. Budget management activities consist of preparation of the overall Administration budget, supervision of Administration's allotment control system, and the development of improved programing procedures. This office is establishing methods for the development of operation and maintenance standards to be used in developing program requirements and it supplies leadership in development of necessary progress and fiscal reporting systems for program measurements and work performance evaluation.

The management research activities have for their primary purposes improvement of the effectiveness and economy of the Administration's work. This activity consists of developing and coordinating a management program for the Administration which involves identifying and anticipating managerial problems and relating them to program objectives; clarifying organizational arrangements so that the responsiblity for work is clearly defined and accepted. These activities also include the operation of the Administration's incentive award system and the management improvement program. More specific tasks performed are: Maintenance of the Bonneville Power Administration's Administrative Manual, control and issuance of forms, participation in space and building planning, and the development of office procedures.

The workload for the Branch of Personnel Management is necessary to provide essential personnel services to over 3,000 employees within the entire Bonneville Power Administration. The workload incorporates activities which contribute to more effective and economical management through more efficient employee utilization; continuing attention to salary and pay administration; improved communication to management and employees on personnel policy, administration and regulatory matters; comprehensive application of the merit system in the recruitment, selection and placement of people; protection of the Government's interest through careful performance evaluation; improved performance through training; and protection of employees with lowered costs to the Government through a continuing safety program.

1. General administration: This activity is the least susceptible of precise measurement. The time of the director of personnel, the employee and veterans relations officer, and the assistant to director are included in this among others. Nine positions full time and two at 60 percent each are included.

In the administration of policy, procedural, regulatory, and basic records management the following can be specifically identified.

(a) Service record cards for 3,000 employees:

	Man-hours per year
(1) Posting about 8,000 actions, at 8 actions per hour.	
(2) Preparing monthly, quarterly, and annual reports.	
(3) Answering approximately 6,250 personal and telephone inquiries per year, at 2 minutes per call.	
(4) Writing about 3,900 letters per year requesting files and answering credit letters, at 6 minutes per letter.	
(5) Preparing 26 within-grade promotion lists, at 16 hours per list.	
Total	2,194

(b) Issue 12 policy and procedure statements:
(1) Reasearch in laws and regulations.
(2) Procedural and forms studies.
(3) Writing initial statements.
(4) Obtaining approval and clearances.
(5) Rewriting statements.
(6) Typing and reproducing.

	Man-hours per year
Total	2,400
(c) Miscellaneous reports for Department of Interior, Budget Bureau, Civil Service Commission, Congress, and BPA. About 100 reports averaging 8 man-hours per report	800
(d) Reading, digesting, and filing releases: (1) Civil Service Commission. (2) Comptroller General and GAO. (3) Interior Department. (4) Federal Register.	
Total	800
2 man-hours per release	1,600
(e) Maintain: (1) IBM code book: 12 releases at 8 hours each. (2) Personnel handbook: a. Bring up to date. b. 12 releases, at 8 hours each	352
(f) Study results of classification audits: (1) Analyze causes for downgrading. (2) Recommend remedial actions. 25 audits per year, at 16 hours each	400
(g) Miscellaneous special projects: (1) R. i. f. registers—25 man-hours per register and 4 registers per year. (2) Changes in Whitten amendment requiring a search of all personnel actions	340
Total	8,086

In the conduct of the employee utilization activity the following estimates are provided, using 2 positions directly on a 60-percent basis and the intermittent time of other persons charged to general administration.

	Man-hours
(a) Planning, coordinating, studies, evaluations, reports	1,250
(b) Personnel management studies	250
(c) Policy and procedural administration	650
Total	2,150

2. Classification: In the administration of the Classification Act of 1949 during fiscal year 1954 for over 2,000 annual employees, the following workload, based on actual experience, will be met (shown in man-hours):

	Man-hours
400 new descriptions of positions	800
600 vice actions	300
800 reclassification actions	1,600
	2,700
2,000 positions surveyed and audited: Preliminary studies for surveys, of 29 major organizational segments	2,320
Preparation of reports and findings	2,230
	8,640
Clerical requirements for preceding	2,912
Total	14,252

Effective staff time available: 4 positions at full time and 2 at 40 percent each. Estimate 8,697 hours effective; for classifying activity alone approximately 2 man-years short of meeting estimated load.

3. Placement and training: In the conduct of the placement activity, there are eight full positions, and following identifiable work load.

	Number	Man-hours
(a) Certification: Various actions (forms)	7,452	2,150
(b) Personnel actions: Various actions (forms)	15,056	4,100
(c) Placement:		
Interviews	2,150	2,000
Performance ratings	3,000	200
Other	2,700	900

In the conduct of the training activity, the following:

Apprenticeship training	950
Supervisory training	1,475
Employee orientation	400
Administrative training	500
Personnel technician training	125
Training classes and courses (extension)	600
Technical and clerical work	300

4. Local board of civil-service examiners: In the administration of the local board of civil-service examiners under delegated authority from the Civil Service Commission, the following workload based on actual count of current activity is forecast for fiscal year 1954. Three positions at full time are used in this work, and 10 percent of another in a supervisory capacity. It should be recorded that the Civil Service Commission contemplates an expanded program for such decentralized boards in fiscal year 1954.

(a) Number of outside applicants interviewed per year	625
(b) Pieces of outgoing mail, other than to BPA, emanating from local board per year	4,200
(c) Number of civil-service registers presently maintained by board	79
(d) Number of eligibles on civil-service registers at present time	1,826
(e) Number of applications checked and rated by local board	2,700
(f) Number of civil-service certificates issued by local board	250
(g) Number of outside authorities issued by local board	85
(h) Number of placements made from local board registers	275
(i) Number of examinations open at present time	18
(j) Examinations to be announced fiscal year 1954 or reannounced, due to insufficient eligibles remaining on register	10

5. Safety: The following identifiable workload for the safety activity:

(a) Accident:		
Nonlost time injuries		275
Lost-time injuries		125
Fatalities		0
Bureau of Employee Compensation cases		400
Automotive		175
Vehicles		1,050
Miles traveled	millions	10
(b) Inspection and training:		
Field travel	miles	120,000
Tort claim investigations	each	200
General investigations	each	100
Driver training	drivers	300
Training meetings	each	500

Eight man-years are shown in fiscal year 1954 for this work, which will meet all except coincidental work peaks in the conduct of the above work.

The engineering direction and supervision activity consists of the review and coordination of the operation and maintenance program, including overall direction of the area operations and maintenance of the system. This activity consists of analyzing workloads, determining staff requirements, establishing work priority, and the development and supervision of work standards. Requirements of budget document total $34,532.

The legal work of the Administration is the responsibility of the Office of the General Counsel. Budgetary operation and maintenance requirements for fiscal

year 1954 total $53,197. A large portion of the work of this office is of the kind ordinarily required in a Government agency. However, the Administration's function as a large utility organization results in many problems which are the business type. One of the major responsibilities of the Administration's legal staff is to insure that the business activities of the Administration are on a sound legal basis within restrictions and limitations imposed by law on Government instrumentalities. Legal activities consist of consultations at the top level on general policy and major program matters, assistance to the top staff on financial and organizational planning, including problems relating to the allocation of costs, development of payout schedules for new projects, relationships of rates to financial payouts, development of operating plans and assistance on interagency relationships. In the power-marketing field, the legal staff prepares all contracts relating to power sales, transfers, and exchange of electric energy and installation of facilities. It advises the Administrator and the power manager on the interpretation and enforcement of power contracts and its responsibility for the form of contracts, rate schedules, and other legal documents used in the carrying out of the Administration's marketing policies.

Information and reports activities will require $46,920. These activities include the preparation and clearance of all publications required by law, including the annual report and other similar reports required by Congress, preparation and editing of technical reports required by the staff, and reports required by the Administration's customers, trade magazines, newspapers, etc., for periodic news releases on important Administration activities. It also includes preparation and distribution of informational matter requested by civic and business groups, customers, and similar organizations.

B. FISCAL AND ADMINISTRATIVE SERVICES

The Administration's operation and maintenance budget for 1954 includes an estimate of $450,746 for the group of activities designated as "Fiscal and administrative services." This is made up of several subactivities which are related to the operation and maintenance workload rather than to the number of customers. Included in the estimate are the following major items:

1. Supervision and control of accounting, financial and office services and internal auditing, which involve cost allocations, repayment studies and agreements, rate-payout studies, analysis of accounting procedures, auditing of accounting media, etc.

2. General cost and fiscal accounting for operations as required by law. For 1954 it is estimated that the workload will include 9,809 bureau vouchers, 28,513 labor reports (timesheets), 56,550 stores issue media, 4,350 purchase orders and bills of lading, 4,640 equipment use reports, and 1,160 service requisitions and shop orders. All of this large volume of original accounting media arising out of operation and maintenance must be checked and processed into the accounting records.

3. IBM accounting machine operations to process the accounting media, prepare payrolls, inventory control reports, detail cost ledgers and many other basic accounting and budgeting reports. This will require the punching, tabulating, sorting, collating, reproducing, and so forth, of a very large volume cards. For example, on O. and M. activities it is estimated that 5,700,000 cards will be tabulated, 17,100,000 cards will be sorted, and so forth, to mention only 2 of the several machine operations.

4. Audit and certification of every disbursement voucher as required by law. The 1954 disbursements for O. and M. are estimated at nearly $6 million. This will be based on workload volumes such as:

	Number of items
Vouchers and claims processes	9,569
Payroll vouchers (each involving hundreds of checks) processed	240
Checks issued	38,345
Travel orders audited	1,060
Bond deductions handled	7,863
Time reports audited before preparing payrolls	28,513
Leave applications processed	13,697
Retirement deductions taken	23,282
Social-security deductions taken	5,330
Individual payroll changes	8,444

This large volume of record processing and record keeping is further increased by preparation of tax-withholding reports, individual employee earnings, pension and leave records, etc. In March 1953 we are required to initiate tax withholding for Oregon State income tax, a new workload.

4. Accounting reports and special studies. This includes many reports required by law and for management purposes. These include reports to the Federal Power Commission and other agencies. Special studies are required for determining depreciation expense, allocation and repayment of costs, and for hearings before the Bureau of the Budget and congressional committees.

5. The technical library which handles several thousand items annually to serve the legal, engineering, and other staffs.

6. The furnishing of office services, such as telephone service, office space, repair of typewriters, calculators, etc., and handling of office supplies.

7. The printshop which handles mimeographing and other reproduction services required throughout the Administration for reports, instructions, diagrams, etc. The number of issues from the shop runs into millions of pieces.

8. Mail and records work, including the central files for the Administration. It is estimated, for example, that for operation and maintenance in 1954 there will be 68,827 pieces of incoming mail and 52,103 pieces outgoing in addition to the problems of carding, classifying, and filing many thousands of items of mail.

9. Many miscellaneous activities are required in reviewing contracts; handling purchases and sales of properties and equipment; general drafting and graphics for reports, charts, and maps; providing communication services, etc.

C. GENERAL SERVICES

The 1954 estimate for operation and maintenance includes $62,949 for general services consisting of:

1. Stores expense	$19,500
2. Procurement	8,157
3. Supervision	18,839
4. Miscellaneous services	16,453
Total	62,949

The cost of receiving, handling, inspecting, and warehousing materials and equipment is designated as stores expense and is charged to the same accounts as are charged with the cost of materials used. The warehouses and stores responsibility is assigned to the Division of General Services. The 1954 estimate for the operation and maintenance portion of stores expense is $19,500.

The 1954 estimate includes an item of $8,157 for procurement activities chargeable to operation and maintenance. This is a relatively small but essential part of the operations program; most procurement activity is related to construction. Estimated 1954 operation and maintenance procurement workload may be summarized as follows:

Item	*Number*
Preparation of contracts for utility services	50
Purchase orders	3,000
Requisitions received	2,200
Miscellaneous contracts, etc	60
Total	5,310

The estimates of $18,839 and $16,453 for suprevision and miscellaneous services represent the operation and maintenance portion of the Office of the Chief of the Division of General Services and the cost of aircraft and other general plant services. The Division includes procurement, supply, aircraft, tools, construction and transportation equipment, inspection, expediting, warehousing, shops, electrical laboratories, maintenance of general properties and equipment (i. e., other than the lines and substations and office equipment), and land activities (appraisal, negotiation, acquisition, management, etc.).

D. MISCELLANEOUS UNDISTRIBUTED ITEMS

The 1954 operation and maintenance estimate for this item is $41,980. It consists of $28,980 for leave accrued as required by the Bonneville Project Act and $13,000 for the extra day's pay arising out of the Federal biweekly pay plan which adds 1 day to the year's actual payroll requirements. These items are

related to the overall operation and maintenance program but are reported separately in accordance with required budget procedures. The estimate of $41,980 represents a decrease of $7,020 from 1953.

USE OF TRAVEL FUNDS TO SELL BONNEVILLE POWER

Mr. JENSEN. I have always questioned your request for large funds for people under your employ who spend a lot of their time going around, not only in your Northwest area, but into neighboring States, telling the people the virtues of the Bonneville Power Administration and why the people in that area should buy Bonneville power, people in municipalities and industries which have power from other sources at the very time your people are there to sell them on the idea they should buy Bonneville power. I have never felt that that was quite the responsibility of the Bonneville Power Administration. I think there is one place where substantial savings might be made.

That is, of course, an old argument between this committee and a number of your people. I think if there is any town that wants your power, the power of the Bonneville Power Administration, regardless of who they may be they will look you up and negotiate with you. I think that is about the only disagreement this committee and you have had, and that may not be too serious.

But I do think that there have been too many salesmen—I will not use the word "propagandists"—out selling the wares of the Bonneville Power Administration when they should have been doing something else if they were needed at all.

Dr. RAVER. So far as I am concerned, I want to assure you that there is no money for that purpose in this budget.

Mr. JENSEN. No money at all?

Dr. RAVER. No. We have some travel expense here for attending meetings, but it is not for the purpose of selling power. At present, we have no power to sell, as a matter of fact.

Mr. JENSEN. You do not have to sell it; they come and buy it?

Dr. RAVER. That is right, including commitments for future power.

Mr. JENSEN. That is why I want to say I have always felt it was not necessary for a great sales force to be out drumming up business and preaching the great savings that could be made if they would buy Bonneville power.

Dr. RAVER. I just want to make it clear, if there is any of that in here I want my staff to tell me because I do not know of any sales money of that character in here.

Now, these people who are in our field offices deal with our customers about service problems and the sale of power, as far as that is concerned, and billing, and they are not in there to promote anything.

Mr. JENSEN. I do know this, that in past years there has been a lot of money spent in sending people from Bonneville Power Administration, not only around your area, but a long way off, at the expense of the Bonneville Power Administration. I have always felt if an organization, regardless of who it might be, a chamber of commerce or otherwise, wishes to have someone come to speak from the Power Administration, that chamber of commerce should not only pay the travel, the board and room, but they should also pay the man's salary for the time spent and reimburse the Bonneville Power Administration for that. I think that the Administrator, however, must

have some leeway. I think you must have some leeway, Dr. Raver, in determining whether you should or should not make those trips gratis. And when the people ask you to make these talks and these presentations, the question of whether they should pay or not would have to be left to your decision to a great extent. I hope there is nothing in here for that kind of business except for the travel pay that is necessary for the things that are essential to the Bonneville Power Administration.

Dr. RAVER. I agree with your point of view on that, Mr. Chairman. I will be glad not to have to make as many speeches as I have been making.

Mr. JENSEN. It is hard work to travel around the country making speeches. It is no fun.

Dr. RAVER. I am under obligations to organizations in our region. When they ask me to come and discuss our program I do it, but I will be very happy, and I know my wife will be very happy, if I stay home more.

Mr. JENSEN. I am sure of that.

CONSTRUCTION ITEMS RELATED TO DEFENSE REQUIREMENTS

Mr. BUDGE. On this total of $55,200,000 for construction, nearly all of which appears to be transmission lines, would it be possible to give us a statement as to which of those are connected with defense activities and why they are? Could you do that, Dr. Raver, just by item number?

Dr. RAVER. I will do the best I can. It may be a little bit difficult to separate out any specific transmission lines for defense, since certainly all of them are used for defense purposes to a degree. The lines are used for more than one purpose. I will try to do an intelligent job for you, to the best of my ability.

Mr. BUDGE. I would like your opinion as to the ones that you think are the most essential.

Dr. RAVER. All right.

Mr. BUDGE. And progressively down the line.

Dr. RAVER. I will be glad to do that.

(The matter referred to is as follows:)

LINES, SUBSTATIONS, AND RELATED FACILITIES FOR WHICH FUNDS ARE REQUESTED IN THE ADMINISTRATION'S 1954 BUDGET

The general categories of defense priority for lines, substations, and related facilities are as follows:

Main system (*abbreviation, M. S.*).—This group of defense facilities, in general, carries power from the generating or other sources to the principal original load centers, and from these to the more local load centers. At these points the power may be supplied directly to several types of defense load, or conducted over other electrical facilities to such loads. Essentially, these main system facilities are the backbone of the Northwest power pool and cannot be identified with a single type of defense classification. As an example, the lines and transformer banks carrying power from Grand Coulee to Spokane supply directly several large light-metals plants and furnish power to local distributing agencies. These, in turn, have military installations, mining operations, chemical process plants, sawmills, cement plants, irrigation pumps, and a variety of other defense activities connected to their lines. Of even greater importance, the Coulee-Spokane facilities serve to integrate generating and storage operations in the Washington-Idaho-Montana area and to provide a reliable power supply to defense loads throughout that territory. The facilities in the budget for 1954, after deferring

facilities represented by the $2,671,000 budget cut, which fall in this category, are as follows:

105	117	122	148	[1] 299	312	702
106	118	123	150	301	338	711
108	119	136	206	[1] 304	[1] 399	[1] 799
[1] 111	120	141	[1] 224	305	632	840

[1] Facility appears in more than one category.

Strategic metals and chemicals (abbreviation, SMC).—This category includes lines, substations, and related facilities which either directly or through a distributor serve industry operations which are processing strategic metals or chemicals. A great many of these plants are already in operation, many are expanding, and others are being constructed. Requirements for typical operations in this category include: Electric power for processing of fissionable materials, for the expansion of chlorine and caustic plants, for new aluminum plants and for the expansion of others, for a large ferronickel plant and a silumin (silicon aluminum) plant, and for a wide variety of mining, metals processing, and chemical applications. The facilities in the budget for 1954, after deferring facilities represented by the $2,671,000 budget cut, which fall in this category, are as follows:

[1] 111	130	225	308
116	143	[1] 304	701

[1] Facility appears in more than one category.

Military installations (abbreviation, MI).—There are numerous Army, Navy Air Force, and Coast Guard installations located within the Administration's service territory, many of them served directly from the Federal grid system. For the purposes of classification, however, only the Puget Sound Navy Yard has been included in this category. The facilities in the budget for 1954, after deferring facilities represented by the $2,671,000 budget cut, which fall in this category, are as follows:

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Essential civilian services (abbreviation, ECS).—Lines, substations, and related facilities in this defense category supply electric power, through the lines of a distributor, to a host of manufacturing, processing, agricultural, and forest products activities. Included, in addition to these businesses, which comprise the numerous lumbering, plywood, paper pulp, small chemical, and metals plants, irrigation, farming, food processing, and other manufacturing enterprises of the Northwest, are the community requirements of large-population areas contiguous to the larger defense installations such as the Hanford AEC plant, Puget Sound Navy Yard, etc. The facilities in the budget for 1954, after deferring facilities represented by the $2,671,000 budget cut, which fall in this category, are as follows:

115	222	[1] 299	334	636
132	228	307	337	637
137	229	321	[1] 399	699
204	232	324	623	705
209	233	325	624	709
218	234	330	629	[1] 799
219	236	332	633	

[1] Facilities appear in more than one category.

System operations control (abbreviated SOC).—While given a separate classification, the facilities in this group cannot, in reality, be separated from those of the other four categories, whether it be carrier current telemetering, or stream gaging, or a shop or maintenance building, or a truck, these facilities are necessary to the efficient economical operation, maintenance, and construction of the Federal system. In the case of communications facilities, for example, the very integrity of the system's protection system rests on the reliability of carrier and microwave channels. Other channels are necessary for remotely operating and controlling substations, for keeping the dispatcher continuously advised of loading conditions at key and critical points in the network through telemetering, for rapid location and correction of line outages, and for generally regulating and controlling the supply of power from the generating station to the load. The facilities in the

budget for 1954, after deferring facilities represented by the $2,671,000 budget cut, which fall in this category, are as follows:

112	146	[1] 224	341	719	820	850
145	216	[1] 299	622	810	830	860

[1] Facility appears in more than one category.

Mr. BUDGE. It is somewhat difficult for me, at least, to determine which have the highest priority.

Mr. JENSEN. Do you have anything else that you would like to say?

Dr. RAVER. I want to thank you and this committee.

Looking back over a long period of years, I think this committee has done a marvelous job for the Northwest. I do not know that you have agreed with everything we have done or not. That region is really moving forward as a result of the program you people have supported.

Mr. JENSEN. I know that we have struggled with a lot of things with you, but regardless of what party has been in power, we have made great sums available to the Bonneville Power Administration.

Dr. RAVER. You certainly have. You have been very gracious to me personally in all the difficulties we have had to thrash out, and I appreciate that.

Mr. JENSEN. With that, we will say goodby for the time being, and good luck to all of you.

WEDNESDAY, MARCH 18, 1953.

BUREAU OF INDIAN AFFAIRS

WITNESSES

W. BARTON GREENWOOD, EXECUTIVE OFFICER
DR. BURNET M. DAVIS, ACTING CHIEF, BRANCH OF HEALTH
MRS. HILDEGARD THOMPSON, CHIEF, BRANCH OF EDUCATION
EVAN L. FLORY, CHIEF, BRANCH OF SOIL AND MOISTURE CONSERVATION

Mr. JENSEN. We have before the committee this morning the Bureau of Indian Affairs. I understand that Mr. W. Barton Greenwood, the executive officer of the Bureau, is heading this Department before this committee this morning; is that right, Mr. Greenwood?

Mr. GREENWOOD. That is right, Mr. Chairman.

Mr. JENSEN. How long have you been with the Department, Mr. Greenwood?

Mr. GREENWOOD. Mr. Chairman, with the exception of a period of 5½ years when I was with the Bureau of the Budget I have been with the Bureau of Indian Affairs since 1920.

Mr. JENSEN. So you have been with the Indian Bureau about 27 years altogether?

Mr. GREENWOOD. That is right.

Mr. JENSEN. Well, you should know something about it.

Mr. GREENWOOD. I think I know a little bit about it.

Mr. JENSEN. I know you have been before this committee every year, I believe, since I have been a member of this committee.

Mr. GREENWOOD. I think that is right. I think I was here the first year you were a member of the committee.

Mr. JENSEN. So you should be in a good position to give us the information we seek in order to appropriate intelligently for the Bureau of Indian Affairs.

GENERAL STATEMENT

Now, Mr. Greenwood, did you have any statement, oral or written, which you would like to place in the record at this time?

Mr. GREENWOOD. I have no oral statement to make, Mr. Chairman, but we do have a written statement that has been prepared which I would like to offer for the record.

Mr. JENSEN. Would you summarize that orally for us?

Mr. GREENWOOD. It is a little lengthy, but it highlights some of the activities of the Bureau during the past year, and also highlights the budget estimates themselves. I think I can give the detail on the budget estimates just as well by reading or briefing this statement.

Mr. JENSEN. All right. Would you like to do that?

Mr. GREENWOOD. Yes, sir.

Mr. Chairman, first, we would like to summarize briefly some of the progress that has been made over the past several months in our program to transfer, step by step, the responsibilities of the Bureau of Indian Affairs either to other governmental units or to the Indians themselves.

We believe that all Indian children should have the opportunity to attend public schools as fast as plans can be worked out. At the present time there are 52,000 Indian children who are enrolled in public schools. Approximately 31,000 of these are enrolled in schools which are receiving financial assistance from the Federal Government under the Johnson-O'Malley Act. Over the past 2 years we have transferred 30 schools, which had an enrollment of 1,319 children, to the public school system. In some cases they had been integrated into systems already existing, while in other cases we have actually transferred the school facilities.

With the help of the additional funds which were provided for public health work for the fiscal year 1953, we now have arrangements under the authority of the Johnson-O'Malley Act for the counties, States, or local district health units to furnish public health services to Indians in 52 areas. We are still in the process of trying to work out a transfer of responsibilities for public health services in most of the States where Indians are now living.

With the additional funds made available for obtaining beds in non-Federal tuberculosis hospitals for Navajo and Hopi Indians suffering from this disease, we have already hospitalized 155 patients in 4 contract hospitals in Arizona, New Mexico, and Colorado, and additional patients are being admitted as rapidly as additional arrangements can be made.

Arrangements have been worked out for the transfer of the Bureau's Hayward Hospital in Wisconsin to a local hospital association pursuant to legislation which authorized such transfers and which was passed in the last Congress. We hope that this is only the first of a number of such transfers that can be worked out under this legislation.

Last year we requested additional road construction funds with the recommendation that a major portion of these funds be spent only on roads that could be completed and turned over to the counties or the States for future maintenance. Construction to be completed

this year will permit turning over to counties 270.1 miles of road for future maintenance.

In January 1952, we began a program of financial assistance in connection with relocation to provide transportation and temporary subsistence for Indian workers and their families who wish to move away from the reservations. This assistance is provided only after a permanent job or definite assurance of one has been secured for the worker, and only if the applicant does not have resources to finance himself. From January through November 1952, approximately 1,900 persons were assisted to relocate, including over 400 unattached workers and over 400 family heads with their families. These persons were relocated in 20 States; some in large urban areas like Chicago, Los Angeles, Milwaukee, Denver, Minneapolis, Dallas, and Fort Worth, and others in many smaller communities. Indians applied for this relocation in such numbers that assistance funds were exhausted by the end of December 1952. There is now a waiting list of approximately 200 Indian families interested in and qualified for relocation who are unable to move away from the reservation because of lack of funds.

We have arrived at agreements with 43 bands or groups of Indians in western Oregon, formerly under the Grand Ronde Siletz Agency, to completely withdraw the services of the Bureau of Indian Affairs from that area. We believe that the job can be finished rather quickly as soon as legislation can be passed and the authority secured to complete the plans and other transactions that are necessary for the final withdrawal.

We have also reached a similar agreement with most Indian groups in California. However, because of the large number of widely scattered groups of Indians in California and the intricate real estate pattern, the job of completing our services there will be difficult. Nevertheless plans have been developed to the point where we believe we can complete the job of transferring our responsibilities, either to the Indians or to the state or local government, within 5 years after legislative authority has been provided.

Legislation needed in connection with both California and western Oregon was drafted in the Bureau last year. In the House the California bill was introduced by Congressman Norris Poulson and Congressman Toby Morris, and the Oregon bill was introduced by Congressman Morris. In the Senate both the Oregon and California bills were introduced by Senator Watkins and Senator Anderson. Unfortunately they came too late in the session to secure final action. It is hoped that these two bills will receive early attention from the present Congress.

Intensive programing operations are under way with 15 or 20 additional tribes, and we believe it will not be long before we can present additional legislation looking to the transfer of services and responsibilities, after agreement has been reached with the tribes themselves and with the local and state governmental agencies.

We believe we have continued to make progress in our administrative work although much remains to be done, particularly in the field of property management.

The question is often asked why the appropriations for the Bureau of Indian Affairs have been increasing in recent years.

The answer is that there is a tremendous backlog of need in the field of education which has not been fulfilled and this need has in recent

years been greatly increased. The same is true in the field of health and sanitation. The progress which has been made in trying to provide additional facilities and services, particularly in the field of education and health, has required additional funds and additional personnel.

The establishment of the Intermountain School at Brigham City, Utah, which has just in the past few months reached its peak enrollment of 2,150 students, in itself requires the employment of 403 additional personnel.

The provision for additional facilities in the Navajo-Hopi long-range program, including hospitals, schools, roads, irrigation projects, conservation, and communications, has required not only additional construction funds and personnel but it requires operating funds to hire additional schoolteachers, doctors, nurses, maintenance workers, and others to maintain the new facilities.

By far the greatest increases in the budget have been in the fields of education and health and in the related program of construction which has been required in order to meet the education and health needs.

There has been some increase in construction funds for the completion of roads, most of which are being transferred to the county and State governments for maintenance after completion, and for the completion of irrigation projects which have been under way for a number of years.

It is the continuing policy of this Bureau to speed up the transfer of service responsibilities to other governmental units as fast as the program can be worked out. There are still approximately 37,000 Indian children enrolled in schools which are operated by the Bureau of Indian Affairs. Of this number, approximately 20,000 are in boarding schools. We are speeding up the transfer of responsibility for school operations to the public-school system wherever this is feasible, and we hope to reduce the number of children in boarding schools as we can provide facilities in cooperation with the State and local welfare agencies for boarding home care for children who are orphans or who do not have proper home facilities. A large number of the children now attending our boarding schools fall in this category. In the case of those children attending the boarding schools because they live in isolated areas where the provision of school facilities is not feasible, we are encouraging family relocation.

We are continuing to explore ways and means of transferring the responsibility for health services to community or local hospitals or to local governmental agencies as fast as this can be worked out.

We are making good progress in transferring responsibility for road maintenance especially on key roads, and we believe this transfer program can be continued.

There is a definite need for speeding up the completion of irrigation projects which have been started in order to protect the Indian water rights, provide income for these lands which are irrigable, and provide additional employment for Indians in these areas.

In this year's budget we are requesting an increase of $6,763,333 in the field of health, education, and welfare services over the base figure for 1954. This includes $1,618,843 increase in funds which are to be used mainly for contracting for additional tuberculosis beds in private and public institutions other than those operated by the Bureau of Indian Affairs. The increase would thus be used in meeting the great need that exists to serve Indian tubercular patients and

would provide funds for the operation of the Anchorage hospital of a full-year basis for the fiscal year 1954. It has been the policy of the Bureau to request funds for building and facilities only in areas where other facilities are not available or cannot be made available.

The rather small increase in the field of educational assistance of $987,225 is to meet the expanded operating costs resulting from increased enrollment in the Navajo-Hopi country mainly and the increased cost of operation in public schools and in our own schools due to the rising price levels.

We are requesting an increase of $3,670,400 in the field of training, placement, and relocation which we consider one of the most important items in this budget. Real progress has been made during the past several months in encouraging Indians to seek employment in industry and other related fields of work. In view of the fact that there are over 40 percent more Indians now on reservations than can make a living with the resources available, it is highly desirable that we make sound provision for the additional training of the younger Indians and that we provide financial assistance, where needed, for transportation and immediate subsistence. We believe that it is most important to continue the program of training, placement, and relocation in cooperation with the State employment agencies so that Indians can take their place alongside other people in industry and agriculture with a feeling of security. This program will also relieve the pressure on the resources at the reservation level so that Indians who stay can make a reasonable living, thus reducing the cost of welfare and other services for both local communities and the Federal Government.

We have proved to our full satisfaction through experience during the past year and a half that successful relocation of this type can be made to the advantage of everyone concerned. We have had excellent experience in Los Angeles and Chicago working in cooperation with the executive and industrial employers in the integration of Indians in many different types of industry.

In the field of resources we are asking for reasonable increases in each of the items with the exception of operation and maintenance of irrigation projects. These increases are important to provide the continued service which has been so well started in the field of resources management, including forest and range management, agricultural extension work, credit, soil and moisture conservation, the repair and maintenance of roads, buildings, and utilities, and the management of Indian trust property.

The two largest items in this list are for management of Indian trust property and soil and moisture conservation. The increase for management of Indian trust property is badly needed in order to bring our real-estate operations up to date, meet the increasing demand for services in the field of leasing and sale of lands, and deal with the problem of increased costs of probate and the settlement of estates which have become greatly fractionated following the death of the original allottees and their heirs. This has become a very serious problem in the Bureau of Indian Affairs and one that should be met at the earliest possible date in order to avoid an almost impossible situation. The request for increased funds for soil conservation is closely related to the problem of proper land management. Both of these increases are important to the sound management of Indian land resources.

The increase in the construction field is largely for the continuation of operations under the Navaho-Hopi long-range program, for making

a reasonable amount of further progress on irrigation projects in other areas, and for road construction, which is badly needed and most of which is done after agreement with the State and county governments to transfer the roads to their supervision in the future.

The increase requested in the field of general administration is needed to provide services in relation to the expanded program operations of the Bureau which have been increasing in recent years. The total amount requested is something less than 5 percent of the tota budget.

Program Summary

Mr. Jensen. I should now like to place in the record page IA–1 of the justifications.

(The matter referred to follows:)

Comparative summary of appropriations and appropriations estimates

Appropriations and activities	Appropriation, 1953	Decreases	Base, 1954	Estimate, 1954	Increases—	
					Over appropriation, 1953	Over base, 1954
Health, education, and welfare services:						
1. Hospitals, disease preventive and curative services	$21,444,765	$564,528	$20,880,237	$22,499,080	$1,054,315	$1,618,843
2. Educational assistance, facilities and services	26,010,660	122,885	25,887,775	26,875,000	864,340	987,225
3. Welfare and guidance services	3,412,315	300,000	3,112,315	3,599,180	186,865	486,865
4. Placement services	579,600	----------	579,600	4,250,000	3,670,400	3,670,400
5. Maintaining law and order	353,660	----------	353,660	353,660	----------	----------
Total	51,801,000	987,413	50,813,587	57,576,920	5,775,920	6,763,333
Resources management:						
1. Forest and range lands	2,176,119	----------	2,176,119	2,550,000	373,881	373,881
2. Fire suppression	140,000	----------	140,000	140,000	----------	----------
3. Agricultural and industrial assistance	1,838,982	----------	1,838,982	2,119,080	280,098	280,098
4. Soil and moisture conservation	2,421,672	----------	2,421,672	3,200,000	778,328	778,328
5. Operation, repair and maintenance of Indian irrigation systems	854,000	----------	854,000	854,000	----------	----------
6. Repair and maintenance of roads and trails	2,270,000	----------	2,270,000	2,646,000	376,000	376,000
7. Development of Indian arts and crafts	44,513	----------	44,513	45,000	487	487
8. Management of Indian trust property	1,346,100	----------	1,346,100	2,000,000	653,900	653,900
9. Repair and maintenance of buildings and utilities	1,862,374	----------	1,862,374	2,650,000	787,626	787,626
10. Weed control	300,000	----------	300,000	300,000	----------	----------
Total	13,253,760	----------	13,253,760	16,504,080	3,250,320	3,250,320
Construction:						
1. Buildings and utilities	6,934,000	6,934,000	----------	12,428,000	5,494,000	12,428,000
2. Roads and trails	4,246,000	4,246,000	----------	4,500,000	254,000	4,500,000
3. Irrigation systems	4,940,000	4,940,000	----------	3,941,000	−999,000	3,941,000
Subtotal	16,120,000	16,120,000	----------	20,869,000	4,749,000	20,869,000
Liquidation of contract authorization	1,380,000	1,380,000	----------	----------	−1,380,000	----------
Total	17,500,000	17,500,000	----------	20,869,000	3,369,000	20,869,000
General administrative expenses:						
1. Departmental	800,000	----------	800,000	860,000	60,000	60,000
2. Field	2,725,647	----------	2,725,647	3,540,000	814,353	814,353
Total	3,525,647	----------	3,525,647	4,400,000	874,353	874,353
Revolving fund for loans	1,000,000	1,000,000	----------	1,000,000	----------	1,000,000
Grand total	87,080,407	19,487,413	67,592,994	100,350,000	13,269,593	32,757,006

Mr. JENSEN. The figures on that page are the original budget figures?

Mr. GREENWOOD. Yes, sir.

Mr. JENSEN. Those figures have been revised under the present administration's directive. As we go down through these items and figures will you state what revision has been made in each item?

Mr. GREENWOOD. Very well, sir.

HEALTH, EDUCATION, AND WELFARE SERICES

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$43,924,750	$51,801,000	$57,576,920
Prior year balance available	28,129		
Available from subsequent year appropriation (48 U. S. C. 50d-1)	659,826	800,000	800,000
Available in prior year (48 U. S. C. 50d-1)	−553,708	−659,826	−800,000
Reimbursements from non-Federal sources	22,155	23,600	24,500
Reimbursements from other accounts	28,392	28,000	28,000
Total available for obligation	44,109,544	51,992,774	57,629,420
Unobligated balance, estimated savings	−182,289		
Obligations incurred	43,927,255	51,992,774	57,629,420

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
1. Hospitals, disease preventive and curative services	$16,298,759	$21,514,852	$22,469,080
2. Educational assistance, facilities and services	24,391,980	26,243,497	26,875,000
3. Welfare and guidance services	2,270,811	3,249,565	3,509,180
4. Placement services	576,413	579,600	4,250,000
5. Maintaining law and order	338,745	353,660	353,660
Total obligations from appropriated funds	43,876,708	51,941,174	57,576,920
Reimbursements from non-Federal sources:			
6. Replacement of personal property sold	22,155	23,600	24,500
Total direct obligations	43,898,863	51,964,774	57,601,420
Obligations Payable Out of Reimbursements From Other Accounts			
1. Hospitals, disease preventive and curative services	2,985	23,500	23,500
2. Educational assistance, facilities and services	25,085	4,500	4,500
3. Welfare and guidance services	166		
4. Placement services	67		
5. Maintaining law and order	89		
Total obligations payable out of reimbursements from other accounts	28,392	28,000	28,000
Obligations incurred	43,927,255	51,992,774	57,629,420

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	7,561	8,511	8,548
Full-time equivalent of all other positions	304	237	225
Average number of all employees	7,020	7,890	8,233
Average salaries and grades:			
General schedule grades:			
Average salary	$3,880	$3,918	$3,976
Average grade	GS-5.3	GS-5.2	GS-5.3
Crafts, protective, and custodial grades:			
Average salary	$2,777	$2,793	$2,841
Average grade	CPC-3.2	CPC-3.1	CPC-3.2
Direct Obligations			
Appropriated funds:			
01 Personal services:			
Permanent positions	$23,328,748	$27,138,927	$28,981,218
Part-time and temporary positions	942,906	841,434	790,781
Regular pay in excess of 52-week base	89,725	104,449	111,525
Payment above basic rates	1,210,072	1,315,241	1,501,737
Payments to other agencies for reimbursable details	131,621	104,200	119,200
Total personal services	25,703,072	29,504,251	31,504,461
02 Travel	794,436	869,235	952,098
03 Transportation of things	480,022	528,382	525,995
04 Communication services	115,984	128,799	121,276
05 Rents and utility services	750,608	756,986	787,359
06 Printing and reproduction	3,955	17,536	28,920
07 Other contractual services	4,710,096	6,968,656	7,730,231
Services performed by other agencies	221,321	211,168	231,380
08 Supplies and materials	8,207,011	9,140,975	9,127,962
09 Equipment	1,309,779	1,474,593	934,944
10 Lands and structures	305		
11 Grants, subsidies, and contributions	2,765,074	3,544,344	6,878,712
13 Refunds, awards, and indemnities	155		
15 Taxes and assessments	36,925	38,000	49,096
Subtotal	45,098,743	53,182,925	58,872,434
Deduct charges for quarters and subsistence	1,222,035	1,241,751	1,295,514
Total obligations from appropriated funds	43,876,708	51,941,174	57,576,920
Reimbursements from non-Federal sources:			
09 Equipment	22,155	23,600	24,500
Total direct obligations	43,898,863	51,964,774	57,601,420
Obligations Payable Out of Reimbursements From Other Accounts			
07 Other contractual services	24,234	23,000	23,000
Services performed by other agencies	951		
08 Supplies and materials	2,924	5,000	5,000
09 Equipment	283		
Total obligations payable out of reimbursements from other accounts	28,392	28,000	28,000
Obligations incurred	43,927,255	51,992,774	57,629,420

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$6,992,801	$5,912,133	$6,695,307
Obligations incurred during the year	43,927,255	51,992,774	57,629,420
	50,920,056	57,904,907	64,324,727
Deduct:			
Reimbursable obligations	50,547	51,600	52,500
Adjustment in obligations of prior years	20,229		
Unliquidated obligations, end of year	5,912,133	6,695,307	7,672,227
Total expenditures	44,937,147	51,158,000	56,600,000
Expenditures are distributed as follows:			
Out of current authorizations	39,164,750	46,058,000	50,400,000
Out of prior authorizations	5,772,397	5,100,000	6,200,000

BUDGET REVISIONS

Mr. JENSEN. Starting with "Health, education, and welfare services" the first item is "Hospitals, disease preventive and curative services." The appropriation for 1953 was $21,444,765. The original budget request for this item was $22,499,080. Has there been a revision downward in that item? If so, what is the amount?

Mr. GREENWOOD. Mr. Chairman, might I first give you the overall picture of that? I think it might be helpful to you.

Mr. JENSEN. Yes, go ahead.

Mr. GREENWOOD. The budget that was originally submitted to Congress called for an appropriation of $100,350,000. The revisions that you mention, which have been recommended to the Director of the Bureau of the Budget by the Secretary of Interior, total $11,930,400. So with those revisions the new total for the budget would be $88,419,600 as compared with the 1953 appropriation of $87,080,407. In other words, the increase above 1953 of the revised total would be $1,339,193.

Mr. JENSEN. We will now insert page 4 of the justification in the record and you may proceed.

(The matter referred to follows:)

HEALTH, EDUCATION AND WELFARE SERVICES

Hospitals, disease preventive and curative services

Subactivity	1953 appropriation	Decreases	1954 base	1954 estimate	Increase
(a) Hospital services	$14,267,208	$564,528	$13,702,680	$14,460,000	$757,320
(b) Hospitalization at non-Indian service hospitals	3,359,617	.....	3,359,617	4,221,140	861,523
(c) Practical nurse training program	168,555	.....	168,555	168,555	.....
(d) Disease preventive and curative services	3,097,698	.....	3,097,698	3,097,698	.....
(e) Health program direction	551,687	.....	551,687	551,687	.....
Total	21,444,765	564,528	20,880,237	22,499,080	1,618,843

Mr. GREENWOOD. Now, with respect to the first item, "Hospitals, disease preventive and curative services," the original estimate was $22,499,080. A revision of $500,000 has been recommended in that item, making a new total of $21,999,080, and reducing the increase accordingly.

In the next item, "Educational assistance, facilities, and services," the original estimate was $26,875,000. A reduction of $150,000 has been recommended in that item, making the new total $26,725,000.

In item 3, "Welfare and guidance services," the original estimate was $3,599,180. A reduction of $200,000 has been recommended in that item, making a new total of $3,399,180.

Item 4, "Placement services," had an original estimate of $4,250,000. A reduction of $3,670,400 has been recommended in that item, making a new total of $579,600, which is the same as the amount available in this fiscal year 1953.

The revised total for the items falling within the appropriation of "Health, education, and welfare services," is $53,056,520 as compared with a 1953 appropriation of $51,801,000.

Mr. JENSEN. Let us talk about that first function before we go on to the others.

NURSES, DOCTORS, ATTENDANTS, AND TEACHERS

Your item for "Hospitals, disease preventive and curative services" includes all of your nurses, doctors, and all the people who attend the sick and ailing and disabled in all of the Indian hospitals, both on the mainland and in Alaska?

Mr. GREENWOOD. That is correct, sir. It provides for the operation of 62 hospitals and sanitoria. It provides for Public Health services rendered by physicians, Public Health nurses and other technicians, and provides for physicians and nurses who are giving treatments in Indian homes.

Mr. JENSEN. Yes. Now, how many doctors are employed in these hospitals? How many nurses are employed? How many other people are employed in the hospitals of every nature? I want to know in the final analysis what is the total number of employees we allowed for the Bureau of Indian Affairs in the fiscal year 1953 budget, and of that number how many are doctors and nurses and attendants in hospitals, and how many are teachers.

Then I want to know the same comparable figures requested for 1954 in your revised budget.

The main purpose of that is to ascertain how many people outside of the doctors, nurses, hospital attendants and teachers were employed or are now employed under the 1953 budget; and how many you are requesting for the 1954 budget. Can you give that to me now?

Mr. GREENWOOD. I do not have it on the revised basis for 1954.

Mr. JENSEN. You can come pretty close.

Mr. GREENWOOD. It will not make too much difference except in 1 or 2 categories.

Mr. JENSEN. All right.

Mr. GREENWOOD. So far as the appropriation for 1953 is concerned, for all of the health personnel—I might say, that will include the nonprofessional as well as the professional help.

Mr. JENSEN. I understand that.

Mr. GREENWOOD. In other words, there will be attendants, medical records clerks and that sort of thing.

Mr. JENSEN. Yes.

Mr. GREENWOOD. The 1953 appropriation provided for an average number of 3,132 employees. That is the equivalent of a man-year figure.

Mr. JENSEN. 3,132 in 1953?

Mr. GREENWOOD. The 1954 budget provides for 3,371.

Mr. JENSEN. Is that the revised budget?

Mr. GREENWOOD. There will be no change, because the revision is against contract beds for Navaho and Hopi Indians suffering from tuberculosis.

EXPLANATION OF INCREASE

Mr. JENSEN. What is the need for the extra 239 people?

Mr. GREENWOOD. Most of those, Mr. Chairman, would be for the new Anchorage Hospital which we had hoped to open by the 1st

of January this year. Apparently now it will be at least June 30 before we will have it opened. Funds were appropriated on a part-year basis for this fiscal year to take care of 90 patients, I believe it was. For the next fiscal year funds in the budget would provide for an average of 300 patients.

Mr. JENSEN. What do you estimate you would need in doctors, nurses, and attendants for every 100 patients?

Mr. GREENWOOD. Dr. Davis, can you answer that question?

Dr. DAVIS. The ratio on which we have based these estimates is approximately 1 person to each 1.09 patients. Roughly 90 persons per 100 patients.

Mr. JENSEN. How does that compare with private hospitals?

Mr. GREENWOOD. I would say that compares very favorably. We are under, if anything.

TOTAL PERSONNEL

Mr. JENSEN. What is the total number of personnel which was provided for in the 1953 appropriation?

Mr. GREENWOOD. In the 1953 appropriation, including all funds—this would include Indian tribal funds as well as special accounts, such as power revenues and collections from water users, operation and maintenance collections, and transferred funds—there is a total of 13,902 man-years.

Mr. JENSEN. 13,902. What is the 1954 total?

Mr. GREENWOOD. This figure will change because of revisions. In 1954 it is 14,924.

Mr. JENSEN. Over 1,000 more are being requested for 1954 than for 1953. Does your revised budget take a number of those people off the payroll?

Mr. GREENWOOD. It will reduce the figure for 1954; yes, sir.

Mr. JENSEN. To what degree?

Mr. GREENWOOD. I cannot tell you offhand.

Mr. JENSEN. What would be your estimate?

Mr. GREENWOOD. Well, I would guess—and it is a pure guess—around 500 people, 500 man-years.

Mr. JENSEN. What branches would be reduced?

Mr. GREENWOOD. Well, they would be in the welfare activity, in the placement and relocation work——

Mr. JENSEN. How much was that placement item reduced?

Mr. GREENWOOD. That was cut by $3,670,400.

Mr. JENSEN. From what figure?

Mr. GREENWOOD. From $4,250,000.

Mr. JENSEN. Leaving how much?

Mr. GREENWOOD. Leaving the same amount we have this year, which is $579,600.

Mr. JENSEN. How many people are now employed in that work?

Mr. GREENWOOD. In the placement activity?

Mr. JENSEN. Yes.

Mr. GREENWOOD. There were 73 on the payroll as of January 31.

PLACEMENT SERVICE ACCOMPLISHMENTS

Mr. JENSEN. And how many Indian people have received employment through this function during the past year?

Mr. GREENWOOD. For the calendar year 1952, Mr. Chairman, there were approximately 59,000 people placed.

Mr. JENSEN. Not 59,000?

Mr. GREENWOOD. Yes. I was going to say that our service does not claim credit for the 59,000, but that is the number of Indians reported to us by employment agencies, such as the State employment service and the Railroad Retirement Board, as having been placed. We know that our people participated in over 13,000 of those placements.

There were 59,000 altogether, approximately, and our people participated in about 13,000 of those placements.

Mr. JENSEN. Does that include the people who received employment in factories, such as in Chicago and other places?

Mr. GREENWOOD. That is right; yes, sir.

Mr. JENSEN. How many people received such employment under the Placement Service?

Mr. GREENWOOD. Well, all of the 13,000, of course, received employment. We have a financial assistance program.

Mr. JENSEN. That is what I mean.

Mr. GREENWOOD. There were 1,785 there.

Mr. JENSEN. That is what I mean. They were actually sent out from the reservation.

Mr. GREENWOOD. We call them relocated.

Mr. JENSEN. Relocated people?

Mr. GREENWOOD. Yes, sir.

Mr. JENSEN. How many of that number have returned to the reservations?

Mr. GREENWOOD. I think it runs about 22 percent. About 78 percent remained and 22 percent returned.

Mr. JENSEN. That is your last figure?

Mr. GREENWOOD. Yes, sir.

Mr. JENSEN. Do you know why those people return?

Mr. GREENWOOD. Oh, for various reasons—illness, homesickness, loss of employment in some cases, better offers of jobs. There are a variety of reasons. I would say there are a dozen or more reasons why. We tried to ascertain in each case why the person left his employment, because we thought it would help us in planning the program in the future.

Mr. JENSEN. I see. Off the record.

(Discussion off the record.)

ORGANIZATIONAL AND PROGRAM CHANGES

Mr. JENSEN. Has there been any reorganization in the Department during the past year? What I mean is: Have any offices been abolished or have any district offices or otherwise been consolidated?

Mr. GREENWOOD. No, Mr. Chairman; there has been no change in the organizational pattern during the past year.

Mr. JENSEN. Apparently there has been no saving made by a reduction in force. There is a request for more people in the Bureau

for 1954 than in 1953. It follows that there would be more money asked for in this budget dollarwise than there was in 1953.

Mr. GREENWOOD. That is correct, Mr. Chairman. Of course, some of that increase is due to the fact that we are opening new institutions.

Take the Navajo-Hopi long-range program, for example, where we are building additional school facilities. The new schools will require more teachers.

The new Anchorage Hospital also will require more health personnel.

Some of the increase in personal services for 1954 is due to the proposed expansion of the placement and relocation program. Some of it is due to the proposed expansion of the forest and rangeland program, which involves timber sales as well as range and timber management generally.

There was some proposed increase in credit personnel, handling the $20 million credit program.

In "Soil and moisture conservation" we propose expansion of the existing program in areas where the work is now not going forward at an economic rate.

In the "Repair and maintenance of roads" some increase was proposed in order to do a better maintenance job on the roads.

LAND OPERATIONS

A rather large increase is proposed in our real-estate operations, where we are in a very bad situation. At the close of the last fiscal year we had more than 17,000 transactions representing a backlog of work. We handled some 33,000 during the course of the year. Despite that work output we still have over 17,000 transactions on hand, to be handled, at the end of the last fiscal year, and it is causing a lot of dissatisfaction among the Indians, among the white people who are interested in leasing or buying Indian land, and so on. It has caused trouble to Members of Congress from the Indian States. By that, I mean their constituents are writing them complaining about the Bureau's failure to handle these land transactions currently. That necessitates correspondence from them to the Bureau and necessitates correspondence from the Bureau.

Mr. JENSEN. Let me ask you this question: How many people are employed in the processing of these applications and land transactions?

Mr. GREENWOOD. We have about 132 man-years, money for about 132 man-years of employment.

Mr. JENSEN. After taking 500 people off of the total request for 1954, of 14,924, that leaves 14,424 people in the revised budget.

NUMBER OF TEACHERS

Did you give me the figure for how many teachers there are?

Mr. GREENWOOD. No.

Mr. JENSEN. How many teachers are you asking for? How many did you have in 1953?

Mr. GREENWOOD. I will have to give you a figure representing all educational personnel, Mr. Chairman.

Mr. JENSEN. All right.

Mr. GREENWOOD. In 1953 we had funds to employ 4,495 man-years. In 1954 there is a slight reduction. The total is 4,477 man-years.

The reason for that slight reduction is that we expect during the fiscal year 1954 to transfer some of our schools to public-school operation. We will assist the States or school districts through our so-called Johnson-O'Malley Act education contracts.

Mr. JENSEN. All right.

Mr. GREENWOOD. The number of people we will directly employ will be decreased.

Mr. JENSEN. What I am trying to find out is how many people are employed as teachers, purely as teachers in the Indian schools, for 1953 and also for 1954.

Mr. GREENWOOD. I do not have the teacher figure alone.

Mr. JENSEN. Does any of your staff have it here?

Mr. GREENWOOD. No; I am sure we have not compiled that figure alone.

Mr. JENSEN. Approximately how many would it be?

Mr. GREENWOOD. Mrs. Thompson, would you want to estimate the number of teachers?

Mrs. THOMPSON. In 1952 there were 1,326 teachers in schools in the States.

Mr. JENSEN. What is your request for teachers this year in this budget?

Mrs. THOMPSON. I cannot answer that.

Mr. GREENWOOD. I would say it would be something less than the figure Mrs. Thompson has given you.

Mr. JENSEN. Say it was 1,300.

Mrs. THOMPSON. Mr. Greenwood, I would like to add that those are teachers in the States. I do not have the number of teachers for Alaska.

NUMBER OF EMPLOYEES OTHER THAN MEDICAL AND EDUCATIONAL PERSONNEL

Mr. JENSEN. You have a little over 9,000 people right now on the payroll today, other than nurses, doctors, attendants in hospitals, and teachers; and you are asking for even more than that for 1954. You are asking for about 9,500 people in addition to the teachers and doctors and nurses and attendants in hospitals. I am wondering if that figure or anything near that figure could be justified from the standpoint of good business principles.

Mr. GREENWOOD. Mr. Chairman, a large number of the 9,500 you mention, while they are not teachers, are necessary to the operation of the schools, especially the boarding schools, where you have to have facilitating personnel in addition to your teachers.

Mr. JENSEN. I understand you have to have that.

Mr. GREENWOOD. The same thing is true in the hospitals, where in addition to doctors and nurses you must have ward attendants, kitchen helpers, maintenance people, operating engineers. In many cases our institutions, as you well know, are located in fairly isolated areas where we have to provide all of the incidental services to the operation of an institution, such as heating, power, sewerage, and so on.

By far the larger number of people who are employed fall within this category of institutional operations.

I have a statement here showing the actual employment as of January 31. I think you might be interested in some of the figures.

In the health program a total of 3,083 people were actually employed.

In the education program there were 4,328.

In the welfare program there were 93.

In the placement program there were 73.

In the law and order program there were 76.

In the forest and range management program there were 275.

Twenty-eight people for that period were engaged in fire suppression work.

In the agricultural and industrial assistance field, which includes extension and credit, there were 255.

In the soil and moisture program there were 326.

In the operation and maintenance of irrigation systems there were 140. That is from appropriated funds exclusive of collections from water users.

In the repair and maintenance of roads and trails there were 423.

MAINTENANCE PERSONNEL

Mr. JENSEN. Let me ask a question right there on your roads and trails. Do you contract any of that maintenance work?

Mr. GREENWOOD. Not the maintenance; no, sir.

Mr. JENSEN. No maintenance whatever?

Mr. GREENWOOD. Well, I say "No." We do occasionally contract for blacktopping a strip of road; but, generally speaking, most of the maintenance work is done by force account by our own people.

Mr. JENSEN. On a yearly salary basis?

Mr. GREENWOOD. No.

Mr. JENSEN. On a day-hire basis?

Mr. GREENWOOD. Most of them are on a wage basis.

Mr. JENSEN. On an hourly basis?

Mr. GREENWOOD. Yes, sir.

Mr. JENSEN. In other words, you do not put a person on the payroll, for maintenance, and keep him on that payroll year in and year out?

Mr. GREENWOOD. Not generally speaking. We do have some maintenance people who are employed the year around.

Mr. JENSEN. Except for the people who administer the program and boss the program and so on?

Mr. GREENWOOD. That is correct. In some areas there is a necessity that we maintain a crew the year around. You can take the Dakota area, for example, where you have a large snow problem in the wintertime. It is just as much a problem of maintenance in the wintertime as it is in the open season.

LAW AND ORDER

Mr. JENSEN. I understand that. Now, the maintenance of law and order is not a large item, but what is the condition now so far as law and order on the Indian reservations is concerned?

Mr. GREENWOOD. It is spotty, Mr. Chairman; as it always has been. We have our problem areas and we have areas where the problems do not exist to any great extent. At the moment the Southwest area is giving us some trouble, principally because of liquor.

Mr. JENSEN. But you would say it is no worse and no better than it has been?

Mr. GREENWOOD. Not to any great extent any worse. In some areas it is a little worse and in others it is a little better.

ALASKA HOSPITALS

Mr. JENSEN. Turning to Alaska for just a minute, are the hospital beds in Alaska being fully utilized?

Mr. GREENWOOD. Not fully utilized, Mr. Chairman. We have had difficulties at Mount Edgecumbe in recruiting sufficient staff to make use of all the beds available there. Outside of Mount Edgecumbe the beds are being pretty well utilized.

Mr. JENSEN. How many hospital beds do we have for the Indian Service in Alaska?

Mr. GREENWOOD. In Alaska we have around 500. We will have over 900 with the new Anchorage Hospital.

Mr. JENSEN. Have you made any progress in transferring Indians from the Indian Health Service to the regular white hospitals?

Mr. GREENWOOD. Yes. With the additional $1,315,000 that Congress appropriated this year for the hospitalization of the Navajo Indians afflicted with tuberculosis we have been able to contract for 193 beds. We expect to utilize the maximum number of contract beds within the money we have before the end of this year.

HOSPITAL CHARGES

Mr. JENSEN. What is the daily rate charged an Indian patient for hospitalization in other than Indian hospitals, on an average?

Mr. GREENWOOD. For general hospitalization the average is around $15.50 a day. On the tuberculosis beds I mentioned our actual experience with these additional institutions we are utilizing runs about $15.40.

Mr. JENSEN. What is the estimated cost per patient per day in Indian hospitals?

Mr. GREENWOOD. Ours is a little better than $12 a day. That is for all types of institutions, general as well as tuberculosis. This figure includes the doctors' salaries or fees, which are extra in private hospitals.

Mr. JENSEN. Yes.

Mr. GREENWOOD. That compares with a national average of over $20 a day.

CALIBER OF HOSPITAL CARE

Mr. JENSEN. Would you say that the patient was as well taken care of and receives as good care and treatment in an Indian hospital as he does in a private hospital?

Mr. GREENWOOD. Dr. Davis might disagree with me on this, but I rather think it would compare very favorably.

Mr. JENSEN. What do you think, Dr. Davis?

Dr. DAVIS. I think on the average; yes; but it is very spotty, as Mr. Greenwood said, with regard to law and order. We have many areas where these small hospitals are extremely difficult to staff on a continuing basis. We feel that in some of these areas we can get better care for the Indians if we can put them into community hospitals where everyone else is being taken care of and where you have more stable medical and nursing staffs, because the doctors are engaged in private practice at the same time they are taking care of the Indians.

It is impossible to generalize. I think on the average we do pretty well, but there are places where we feel we could do better in private hospitals.

Mr. JENSEN. Do you handle every kind of an operation in an Indian hospital?

Mr. GREENWOOD. In some hospitals, but not in every hospital. In some of our smaller institutions we have to bring the physicians in from the outside or send the patient to an outside hospital for special surgical work.

TAOS HOSPITAL

Mr. JENSEN. Is that hospital at Taos operating now?

Mr. GREENWOOD. No, sir.

Mr. JENSEN. Why?

Mr. GREENWOOD. Doctor, do you want to answer that question?

Dr. DAVIS. That is an example of a very small hospital where it was difficult to keep a qualified medical staff. There is a rather small group of Indians there. By making use of the Taos hospital as a clinic for outpatient ambulatory service, we have been able to send the patients needing hospitalization either to our hospital at Santa Fe, which is a larger institution where we can get consultants locally for all kinds of cases, or to community hospitals at Taos. We feel Taos is an example of a place where the Indians are getting a better quality of care through the use of our larger hospital at Santa Fe.

Mr. JENSEN. Do you maintain a doctor and a nurse there at all times?

Dr. DAVIS. Yes, sir; we have a full-time medical officer and a nurse at Taos running the outpatient clinic.

Mr. JENSEN. A medical officer?

Dr. DAVIS. A physician; yes.

Mr. JENSEN. All right. You are using it as a clinic?

Dr. DAVIS. That is right, sir. We are using it for patients who come in for examination and for such treatment as can be given without hospitalization. Then, if they require bed care in a hospital, they are transferred either to a local community hospital in Taos or to our Santa Fe hospital. Or, if it is an extremely complicated case, they may go to Albuquerque where there is a larger variety of specialists available.

Mr. JENSEN. So that in effect it is simply a clinic in a temporary hospital. I presume you do have some patients there, do you not, for a short time?

Dr. DAVIS. No, sir.

Mr. JENSEN. Inpatients?

Dr. DAVIS. You see, we cannot keep a staff around the clock for bed care of even 1 patient without having as much staff as you need

to take care of 10 patients. In other words, if you are going to keep a sick patient overnight, you need a nurse on duty at all times; you have to have a maintenance staff on duty at all times; and you have to have a kitchen staff to feed the patient. Therefore, we do not find it economical to operate that type of facility.

Mr. JENSEN. Well, the full value of that hospital, then, is certainly not being realized. It is a very nice little hospital and is quite up to date.

How many beds are there in that hospital? What is the capacity?

Dr. DAVIS. My recollection is that it is about 25 beds.

Mr. JENSEN. How can we justify just using that hospital for a clinic and for emergency cases? We have quite a little money invested in that hospital.

Dr. DAVIS. Yes, sir.

Mr. JENSEN. And it is right in the middle of the town of Taos. I think there are something like 800 people in that Taos Tribe, as I remember it. Yet the hospital is not utilized. If anyone gets sick and needs an operation, you take him to Santa Fe or Albuquerque.

Mr. GREENWOOD. Doctor, do you remember what our patient load was there?

Mr. JENSEN. I never could understand why that hospital should not be used more than it is.

Dr. DAVIS. I believe the average daily load was in the neighborhood of 5 or 6 patients. That is about what one would expect, from the national average, for a population of about 1,000 Indians.

Mr. JENSEN. Why did we ever build the hospital there to start with?

Dr. DAVIS. That, sir, is a question I am not prepared to answer, since I have been attached to the Bureau of Indian Affairs only since 1948.

Mr. GREENWOOD. Certainly our experience in the later years has indicated it should not have been built.

Mr. JENSEN. How many other hospitals in that category do we have in the Indian service for which we are paying upkeep and which are not being utilized to a great extent?

Mr. GREENWOOD. Well, in the past 4 or 5 years we have closed about 10 small institutions as hospitals and converted them into this clinic type or outpatient type of facility. Now, we did it because it was too costly to keep them running as small hospitals, the patient load did not justify it, and we were having trouble staffing the hospitals.

Mr. JENSEN. There must not be over one-fifth of that building that is being used today. I presume you need schoolhouse facilities in that Taos area, do you not? I wonder why we could not convert most of that hospital into classrooms.

Mr. GREENWOOD. I do not recall that there is any need for additional classroom space in that area. Mrs. Thompson, are you familiar with that?

Mr. JENSEN. All right. If we cannot do that, why do we not use it for some other purpose? Can we not make a general service building out of it to house, let us say, the Soil Conservation Service offices and other offices which are scattered around the country in that area?

Certainly we should be using that building for some good purpose. We should not just let it stand there without being used. That is poor business.

HOSPITAL BUILDINGS NOT IN USE

If you have closed other hospitals in other places, what are you doing with the buildings?

Mr. GREENWOOD. We are utilizing only that portion needed for the outpatient service.

Mr. JENSEN. Yes, I would imagine so. The rest of the building is standing there and is not being used, while we are building hospitals, schools, and everything else all over the country, and in these reservations. Somebody has made some poor guesses along the line.

Mr. GREENWOOD. I think it has been a combination of factors, Mr. Chairman. Conditions have changed in some of these areas. There was a need at the time the hospital was built but the health conditions among the Indians have improved in some cases. In other cases the Indians have moved away.

Mr. JENSEN. I could understand how that could happen to some degree, but it does not appear to me that is the full answer. It costs a lot of money to build those buildings. Now they are not being used. Either we ought to dispose of them or make better use of them.

Is any attempt being made to dispose of buildings that are not needed?

Mr. GREENWOOD. Yes. We have a property survey team in the field constantly.

Mr. JENSEN. Are they disposing of any buildings?

Mr. GREENWOOD. Yes, sir.

Mr. JENSEN. What do they do with the money?

Mr. GREENWOOD. It goes into the general fund of the Treasury.

Mr. JENSEN. Do you give an accounting of that and show that?

Mr. GREENWOOD. Yes, sir. There is a statement that we can file with the committee showing the revenue that went into the Treasury during the fiscal year 1952.

Mr. JENSEN. Let us have an account of that placed in the record, listing the property that was sold, the amount that was received for each sale, and the total covered into the Treasury.

Mr. GREENWOOD. The statement I referred to, Mr. Chairman, would simply be a statement showing the revenue going into the general fund under general receipt classifications. It would not be in the detail you just mentioned.

Mr. JENSEN. You had better put it in detail. You had better put it in complete detail. We would like to have a picture of this thing, to see what goes on. That is our responsibility as representatives of the people.

I think it is the responsibility of the Bureau of Indian Affairs to give a full accounting of such transactions, which I am asking for right now, to be placed in the record.

(The matter referred to follows:)

Statement showing buildings sold during fiscal year 1952 and the total proceeds to the Treasury

Location	Type	Number of buildings	Proceeds to Treasury
Colorado River Agency	Barracks, warehouses, dining halls, etc.	[1] 869	$80,065
Fort Hall Agency	2 garages	5	239
	1 poultry house		21
	1 hog house		33
	1 guest cottage		50
	1 Washakie day school building		1,750
Total		874	82,158

[1] The 869 buildings sold were originally constructed by the Army on the Colorado River Reservation at Poston, Ariz., as a relocation center to receive 20,000 Japanese-Americans during World War II.

In addition to the number of buildings sold, the Bureau of Indian Affairs condemned approximately 550 buildings for destruction, abandonment, donation to Indians or Indian groups, or salvage which did not result in a return of funds to the Government since they were removed as fire and safety hazards and were disposed of with the least possible expense to the Government. The savings resulting from this disposal was in the salvage of material for maintenance purposes and although there were no funds deposited in the Treasury, the Government actually saved thousands of dollars in maintenance or razing expenses by transferring obsolete buildings to Indians or Indian groups.

STATEMENT SHOWING SCHOOLS BY AREA WHICH ARE ON LOAN TO STATE OR LOCAL SCHOOL DISTRICTS

Aberdeen area:

1. School No. 12 (Pine Ridge Agency)
2. Wakpamni School (Pine Ridge Agency)
3. Grass Creek School (Pine Ridge Agency)
4. School No. 13 (Pine Ridge Agency)
5. Hisle School (Pine Ridge Agency)
6. Potato Creek School (Pine Ridge Agency)
7. Rosebud School (Rosebud Agency)
8. Spring Creek School (Rosebud Agency)
9. Milks Camp School (Rosebud Agency)
10. Little Crow School (Rosebud Agency)
11. Ring Thunder School (Rosebud Agency)
12. Grass Mountain School (Rosebud Agency)
13. Horse Creek School (Rosebud Agency)
14. Greenwood School (Rosebud Agency)
15. Cannon Ball School (Standing Rock Agency)
16. Crow Hill School (Turtle Mountain Agency)
17. East Side School (Turtle Mountain Agency)

Anadarko area:

1. Seger School (Southern Plains)

Billings area:

1. Heart Butte School Building (Blackfeet Agency)
2. Public School Building (Crow Agency)
3. Lodge Pole School (Fort Belknap Agency)
4. Kirkaldie School (Fort Belknap Agency)
5. Beaver Creek School (Fort Belknap Agency)
6. Hays School (Fort Belknap Agency)
7. Riverside School (Fort Peck Agency)
8. Brockton School Building (Fort Peck Agency)

Juneau area:

1. Akutan School
2. Alitak School
3. Belkofski School
4. Cooper Center School
5. Nikolski School
6. Old Harbor School
7. Perryville School

Juneau area—Continued
8. Tyonek School
9. Afognak School
10. Anchorage Bay School
11. Karluk School
12. Ouzinkie School
13. Port Graham School
14. Cordova School
15. Haines School
16. Hoonah School
17. Juneau Willoughby School
18. Kake School
19. Klawock School
20. Nome School
21. Sitka School
22. Valdez School
23. Yakutat School

Minneapolis area:
1. Grand Portage School (Consolidated Chippewa Agency)
2. Vermillion School (Consolidated Chippewa Agency)
3. Nett Lake School (Consolidated Chippewa Agency)
4. Pine Point School (Consolidated Chippewa Agency)
5. Vineland School (Consolidated Chippewa Agency)
6. Naytahwaush School (Consolidated Chippewa Agency)
7. Odanah School (Consolidated Great Lakes Area Field Office)
8. Lac du Flambeau School (Consolidated Great Lakes Area Field Office)
9. Hotchunkra School (Consolidated Great Lakes Area Field Office)
10. Neopit School (Menominee Agency)
11. Kinnamon School (Consolidated Great Lakes Area Field Office)
12. Inger School (Consolidated Chippewa Agency)
13. Bishop Whipple School (Pipestone School)
14. Red Lake School (Red Lake Agency)
15. Ponemah School (Red Lake Agency)

Muskogee area:
1. Kallihoma School (Five Tribes Agency)
2. Mulberry School (Five Tribes Agency)
3. Rocky Ford School (Five Tribes Agency)
4. Cave Springs School (Five Tribes Agency)
5. Ballou School (Five Tribes Agency)
6. Mount Zoin School (Five Tribes Agency)
7. Yardeka School (Five Tribes Agency)

Phoenix area:
1. Poston School (Colorado River Agency)
2. Uintah and Ouray School (Uintah and Ouray Agency)
3. Camp Verde School (Truxton Canon Agency)
4. Duckwater School (Nevada Agency)
5. Reese River School (Nevada Agency)
6. Walker River School (Nevada Agency)
7. Nevada School (Nevada Agency)

Portland area:
1. Nespelem School (Colville Agency)
2. Inchelium School (Colville Agency)
3. Bannock Creek School (Fort Hall Agency)
4. Kootenai School (Northern Idaho Agency)
5. Lapwai School (Northern Idaho Agency)
6. Lummi School (Western Washington Agency)
7. Skokomish School (Western Washington Agency)

Sacramento area:
1. Hoopa School (California Agency)
2. Fort Yuma School (California Agency)
3. Round Valley School (California Agency)
4. Tejon School (California Agency)

Window Rock area:
1. Churchrock School (Navajo Agency)
2. Mexican Springs School (Navajo Agency)
3. Sawmill School (Navajo Agency)
4. Crownpoint School (Navajo Agency)

Window Rock area—Continued
5. Kayenta School (Navajo Agency)
6. Ganado School (Navajo Agency)
7. Fort Wingate School (Navajo Agency)
8. Tuba City School (Navajo Agency)
9. Navajo Compressor Station (Navajo Agency)

H. R. 1242, a bill authorizing the Secretary of the Interior to transfer title to these schools to State or local school districts, if passed, will release the Bureau of Indian Affairs of accountability for such property.

BLACKFEET AND CROW INDIAN HOSPITALS

Mr. JENSEN. Have you recently closed a hospital for either the Blackfeet or the Crow Indians?

Mr. GREENWOOD. No, sir.

Mr. JENSEN. Are those hospitals in full use?

Mr. GREENWOOD. They are in full operation. I am not sure that our utilization is as high as the capacity would permit. I can give you some figures on that.

During the fiscal year 1952 the average daily patientload in the Blackfeet hospital was 16, and in the Crow hospital it was 25.

Mr. JENSEN. What is the capacity?

Mr. GREENWOOD. The Blackfeet hospital has a rated capacity of 45, and the Crow a rated capacity of 36.

Mr. JENSEN. Is it not possible to hospitalize Indian patients from nearby reservations in those hospitals, to keep them pretty much at full capacity?

Mr. GREENWOOD. It is done to some extent, Mr. Chairman, wherever it is possible to transport the patient. Of course, in these two cases there are other hospitals on the nearby reservations. For example, we have 1 on the Fort Belknap Reservation at Harlem, Mont., and 1 on the Fort Peck Reservation at Poplar, Mont., in addition to the Blackfeet and Crow hospitals.

Mr. JENSEN. Do the Indians on their own volition, when they feel they can afford to go into private hospitals, do so in preference to going into these Indian hospitals? Is that one of the reasons why these Indian hospitals are not used to any greater degree?

Mr. GREENWOOD. I think that is part of the answer. Many of them do prefer to go to outside institutions rather than to a Bureau hospital.

Mr. JENSEN. Of course, that is good if that is the case.

Mr. GREENWOOD. We encourage it. Wherever they are able to pay for the service we recommend that they go to the outside hospitals.

Mr. JENSEN. Do they pay their own bills there?

Mr. GREENWOOD. In most cases, unless we ask the hospital to admit the patient because he is medically indigent, he will pay his own bills.

Mr. JENSEN. Did you have anything to say, Mrs. Thompson?

Mrs. THOMPSON. I have nothing to say on hospitals, sir.

EDUCATIONAL PROGRAM

Mr. JENSEN. We will now insert into the record page 8 of the justification.

(The matter referred to follows:)

Subactivity	Appropriation, 1953	Decreases	Base, 1954	Estimate, 1954	Increase
(*a*) Federal school facilities	$22,919,580	$122,885	$22,796,695	$23,550,000	$753,305
(*b*) Assistance to pupils attending non-Federal schools	3,091,080		3,091,080	3,325,000	233,920
Total	26,010,660	122,885	25,887,775	26,875,000	987,225

(*a*) *Federal school facilities*

The decrease of $122,885 is a deduction of the amount for nonrecurring equipment included in the 1953 appropriation.

An increase of $753,205 is requested for this subactivity. The following table shows the distribution of the 1954 base and the requested increase.

Feature	Base, 1954	Estimate, 1954	Increase
1. Boarding schools	$16,757,560	$17,146,785	$389,225
2. Day schools	5,127,155	5,203,915	76,760
3. Program direction	697,460	697,460	
4. Museums	66,600	69,000	2,400
5. Navaho student transportation	103,520	120,000	16,480
6. Literacy program	44,400	44,400	
7. Anchorage Hospital school		25,000	25,000
8. Annual cost of replacing school vehicular equipment		243,440	243,440
Total Federal school facilities	22,796,695	23,550,000	753,305

ATTENDANCE AT PUBLIC SCHOOLS

Mr. JENSEN. What progress has been made in getting more Indian children into the public schools through State contracts?

Mr. GREENWOOD. We have made some progress, Mr. Chairman.

The average daily attendance for the last school year in public schools receiving assistance from the Bureau is 25,500 Indian children. Next year we expect that average to go up by about 1,000, and that will be due principally to additional contractual arrangements that we are making with the States of Arizona and New Mexico.

We have contracts with 16 States and the Territory of Alaska for educational assistance given to Indian children in public schools.

Of course, there are also many Indian children attending public schools who get no aid from the Bureau, but we do have approximately 25,000 Indian children for whom we pay some part of the cost. We do not attempt to meet the actual cost. We try to render aid on the basis of need, taking into consideration the local revenue which is available to the school district, the amount of State aid, and other sources of revenue. These revenues are compared with their total need for the operation of the schools.

Where the number of Indian children is substantial and the amount of nontaxable land is substantial and revenue from all other sources is not adequate we attempt to provide sufficient funds to permit schools to operate at an acceptable level.

SCHOOLS ON THE NAVAHO RESERVATION

Mr. JENSEN. What is the situation in the Navajo Reservation regarding the number of children of school age who are not in school or where school facilities are not provided for them?

Mr. GREENWOOD. We still have some 12,000 to 13,000 children of school age who are out of school because of the lack of school facilities.

Mr. JENSEN. Is that due entirely to the nonexistence of school facilities, or to a greater degree because of the fact that the Navajo Indians move from place to place, especially those with herds of cattle or sheep?

Mr. GREENWOOD. That is an important factor, but I would say that the majority of those children are out of school because there is no school for them to attend.

TRAILER SCHOOL PROGRAM

Mr. JENSEN. How is this trailer school program working out?

Mr. GREENWOOD. We just got that established this year. You remember we got the money for the first time this year to try out a trailer-type school. Mrs. Thompson was telling me yesterday that we have four units in operation now. I do not know whether they have been in operation long enough to evaluate their worth. Perhaps Mrs. Thompson could tell you.

Mrs. THOMPSON. From the standpoint of children in school, we now have children in school in four units, and another one will be opened up in the next week or so. They have, on the average, about 20 children in each of these trailer units. They have been located over the reservation in the most isolated places where there is water and enough children in that particular area to walk to the trailer unit. In two instances I believe the Navajo parents have provided some type of temporary boarding facilities adjacent to the trailer unit so that the children can stay there for 5 days, and the others are operated on a walk-in basis with no boarding facilities provided. The one which will open up in the next week or two will also be of that kind.

Mr. JENSEN. Then you will have five mobile schools in operation; is that right?

Mrs. THOMPSON. Yes, sir. The schools themselves do not move from place to place. They are located where the water is, and the children walk in to school.

Mr. JENSEN. It contemplates the parents of these children may move, and you could move the schools with them and put these children in the schools, of course?

Mrs. THOMPSON. Yes, sir; or, if the children all move away, we could move the school to another location.

Mr. JENSEN. What type of teachers do you get for these schools?

Mrs. THOMPSON. We have fully qualified teachers in these particular schools. They are teachers who have been in schools on the Navajo Reservation before and are willing to take these schools because it means a little difference in their salary.

Mr. JENSEN. What is the average salary of a teacher in the trailer schools, for instance?

Mrs. THOMPSON. It is a GS–7. What is that average salary, Mr. Greenwood?

Mr. GREENWOOD. It would be about $4,200 a year.

Mr. JENSEN. What is your estimation of the value of these trailer schools, Mrs. Thompson?

Mrs. THOMPSON. Of course, we have not had them in operation long enough to really make a true evaluation of them. I think it is a method of taking care of children until adequate facilities are provided for them.

It is a method of taking care of a portion of the children whose parents possibly in the future—I do not know how long in the future—will move away from the reservation. But it at least gets them into school now.

EDUCATIONAL REQUIREMENTS FOR SCHOOLTEACHERS

Mr. JENSEN. Must an Indian schoolteacher now have a college education?

Mrs. THOMPSON. She must meet civil-service standards.

Mr. JENSEN. Do you think that is necessary in order to teach Indian children?

Mrs. THOMPSON. Yes, sir; I do.

Mr. JENSEN. Why?

Mrs. THOMPSON. Because I think teaching Indian children, non-English-speaking youngsters, requires much more skill than teaching the average youngsters who speak the English language. It requires different techniques and much more schooling, and it is more important that they get an adequate beginning in their education if they come from another culture and another language.

Mr. JENSEN. It is most difficult for me to understand why it is not possible to take an Indian girl who has graduated from high school and send her back to the reservation to teach those little Indian children under, I would say, 10 years old, and do just as good a job if not a better job, than anyone with a bachelor's degree.

I cannot understand that. Of course, I am old-fashioned, but I remember that our neighbor boys would go through the eighth grade, take the teacher's examination and pass it, and come right back to the school that I attended in the country and teach school there; and, of course, we held them in the highest esteem. I think they did a wonderful job in teaching us the things that we should be taught. We did not learn a lot of sociology and a lot of other stuff, but we learned how to read and write, and we studied geography and history. We could go to the town school after we finished that school and enter it and show with the best of them. Now, I do not think that the Indian children are very much different from we farm kids.

Off the record.

(Discussion off the record.)

Mr. JENSEN. On the record.

During the war it was necessary to take teachers who did not have college degrees to teach in the Indian schools. From what I have heard they did very well.

Maybe I am away off base on this thing, but certainly I cannot understand why we have to have such high standards for teachers to teach children under 10 years of age on the Indian reservations or any other place.

Of course, I am not going to set myself up as an authority on the teaching profession. Off the record.

(Discussion off the record.)

WELFARE AND GUIDANCE SERVICES

Mr. JENSEN. We will now take up "Welfare and guidance services." We will put the tables on pages 18 and 19 of the justifications into the record at this point.

(The matter referred to is as follows:)

(*a*) *Welfare*

The following shows the distribution of the 1954 estimate by subactivity:

Subactivity	Appropriation 1953	Decreases	Base, 1954	Estimate, 1954	Increases
1. Direct relief:					
(*a*) Public assistance	$300,000	$300,000			
(*b*) General assistance	1,649,036		$1,649,036	$2,075,000	$425,964
2. Other welfare assistance:					
(*a*) Foster care:					
(1) Boarding home care	418,400		418,400	418,400	
(2) Institutional care:					
(*a*) For delinquents	18,000		18,000	18,000	
(*b*) For handicapped	96,500		96,500	96,500	
(*c*) For children in missions	266,075		266,075	266,075	
(*b*) Miscellaneous welfare assistance	56,670		56,670	56,670	
3. Social services	581,039		581,039	641,940	60,901
Total	3,385,720	300,000	3,085,720	3,572,585	486,865

1. *Direct relief—(a) Public assistance.*—The decrease of $300,000 for this subactivity is the amount appropriated in 1953 for public assistance to Indians in Arizona. No funds are requested for this subactivity in 1954.

(*b*) *General assistance.*—An increase of $425,964 is requested for general assistance. The total estimate will provide an average monthly caseload of 6,300 needy Indians essential subsistence items averaging $27.45 per month.

Tables A and B show the average caseload and expenditures for 1952 and the estimated caseload and expenditures for 1953 and 1954 by months (table A) and by areas (table B).

Caseload and expenditure for general assistance by months

	1952		1953		1954	
	Caseload (persons)	Amount	Caseload (persons)	Amount	Caseload (persons)	Amount
July	[1] 4,243	[1] $83,502	[2] 3,93[illegible]	[2] $85,410	4,200	$115,300
August	4,079	76,241	3,968	85,516	4,200	115,300
September	3,777	71,909	3,800	84,000	4,200	115,300
October	3,775	73,519	3,800	84,000	4,200	115,300
November	4,078	75,257	3,800	84,000	4,200	115,300
December	5,131	87,918	5,159	128,700	5,400	148,200
January	8,291	119,685	8,300	202,500	8,600	236,000
February	10,361	145,333	10,250	241,200	10,500	288,200
March	10,236	141,008	10,250	241,200	10,500	288,200
April	7,986	117,855	8,000	200,000	8,300	227,800
May	5,738	99,535	5,750	143,500	6,000	164,700
June	5,010	95,176	5,000	125,000	5,300	145,400
Total	72,708	1,189,938	72,000	1,705,026	75,600	2,075,000
Average monthly	6,059	16.37	6,000	23.68	6,300	27.45

[1] Includes 3,966 persons who received July allowance in June 1951, amount $81,051.
[2] Includes 3,815 persons who received July allowance in June 1952, amount $82,886.

CASELOAD INCREASE

Mr. JENSEN. Now, referring to page 19, why should the caseload for general public assistance be increasing if a good job with respect to employment and health service is being done, with the large increases which were allowed for these items in recent years?

Mr. GREENWOOD. Mr. Chairman, that projected increase for 1954 is based largely on 2 situations, 1 of which has already developed, and the other of which we expect to develop.

In Oklahoma a number of Indians who have been receiving assistance under the social-security program are being separated from the program because they own an interest in land.

Now, being social-security clients, it means that they have to have welfare assistance, and if they cannot get it under the State program the Bureau has to provide it. That is one situation.

The other is in connection with the opening of the Anchorage Hospital. We expect that many of the patients who will be admitted into that hospital will be family heads who will have to leave their families without earning power, and those families will need some assistance while the head of the family is in the hospital.

Mr. BUDGE. Mr. Chairman, may I ask a question?

Mr. JENSEN. Yes, at any time, Mr. Budge.

Mr. BUDGE. That rather intrigues me. Whether you have a hospital or not, if a person was ill he would not have any income. Why would his being hospitalized have anything to do with it?

Mr. GREENWOOD. Many of them are producing some income. Despite the fact that they have tuberculosis they are earning income for their families.

JUNEAU, ALASKA HOSPITAL

Mr. BUDGE. I can see why that would be true of that disease in that connection, but why are we building a new hospital at Anchorage when the one at Juneau is not being used to the fullest extent?

Mr. GREENWOOD. It is the hospital at Mount Edgecumbe which is not being utilized to the fullest extent. The beds are needed, there is no question about that, at both places. We hope that we will be able to recruit the necessary staff to utilize the Mount Edgecumbe institution to full capacity. Of course, Anchorage will be in a better location from the standpoint of being able to recruit the necessary staff.

Mr. BUDGE. Your justification here on page 1A–5 says the Juneau hospital is not being utilized to its fullest capacity, as I read it.

Mr. GREENWOOD. That embraces all of Alaska really. Our headquarters for the administration of the Alaska activities is located at Juneau, and when we speak of the Juneau area we are talking about the territory over which we have some jurisdiction.

Mr. BUDGE. What is your surplus-bed situation in the Juneau area? That is the hospital that I was talking about.

Mr. GREENWOOD. Doctor, do you have a recent figure on that?

Dr. DAVIS. It is roughly 100 beds. They are not surplus beds but beds which are not being utilized because we have not been able to recruit the necessary staff. Mount Edgecumbe Hospital is in an isolated spot, on an island. It is an old Navy installation, just across the strait from Sitka, which is a very small town of 1,000 people. It is very difficult to get a medical or nursing staff in a place like that, which

is away from a town of any size. We have reason to think that at Anchorage we will have better results in recruitment and that we will be able to staff the hospital adequately to run it at near capacity.

Mr. BUDGE. Then, do you contemplate moving the patients from one to the other?

Dr. DAVIS. No, sir. We have a very large backlog of tuberculosis patients in Alaska who are not now in any hospital. Probably the number of patients with tuberculosis who are not under treatment is at least three times that for which we will have hospital beds when Anchorage is completed.

TRAINING, PLACEMENT, AND RELOCATION SERVICES

Mr. JENSEN. We will insert the table on page 22 of the justifications into the record at this point.

(The matter referred to follows:)

4. Training, placement, and relocation services

Subactivity	Base, 1954	Estimate, 1954	Increases
(a) Program direction	$509,600	$1,192,500	$682,900
(b) Financial assistance	70,000	850,000	780,000
(c) Adult vocational training		2,207,500	2,207,500
Total	579,600	4,250,000	3,670,400

ADULT VOCATIONAL TRAINING

Mr. JENSEN. With respect to the request for $2,207,500 for the adult vocational training program, is it not possible to accomplish most of the objectives of such a program by the employment of Indians in various reservation programs that we appropriate money for?

Mr. GREENWOOD. No; I think not to the extent that this program contemplates, Mr. Chairman.

We are doing a certain amount of on-the-job training now, especially in connection with our construction work on the Navajo Reservation, and we are also putting Navajo Indians into the regular apprenticeship training program, but the work we have outside of the Navajo is not enough to take in any large numbers of people. This program contemplates that these people would be sent to schools for comparatively short courses to teach them some skill, to teach them to use tools so that they would have some qualifications for filling a job that might be located for them, something beyond a pure laborer's job.

Mr. JENSEN. Where are these vocational training schools located now?

Mr. GREENWOOD. The schools that we have made contact with are located in Chicago; Los Angeles, Oakland, Calif.; Denver, Colo.; St. Louis, Mo.; Salt Lake City and Ogden, Utah; and the North Dakota State School of Science at Wahpeton; the school at Bottineau, N. Dak.; Springfield, S. Dak.; Minneapolis, Minn.; Okmulgee, Okla.; Oklahoma City and Albuquerque, N. Mex.

Those are the schools that we have contacted to see whether they would be willing to take or are interested in taking Indians in for comparatively short courses of training in various vocations, and they have indicated that they would like to participate.

Mr. JENSEN. You have some of your own vocational training schools now in existence?

Mr. GREENWOOD. Yes, sir; but they are primarily for the school-age children.

Mr. JENSEN. Of what age?

Mr. GREENWOOD. School age. We have had a great deal of success in placing those youngsters. At Haskell, for example, where we conduct a training course for printers, we have no difficulty in placing those youngsters who complete the school term there, and that course in particular.

Mr. JENSEN. In your own facilities, do you not have every kind of equipment, carpenter tools, and mechanic's tools for repairing automobiles, for instance, and farm machinery, and other tools of a like nature where you could give vocational training to even older people than children of school age?

Mr. GREENWOOD. Yes; we have some schools that are pretty well equipped, and a certain amount of adult training does go on at those schools. It is on a volunteer basis; that is, when the adult is interested and our teachers are interested enough to put in the time without extra compensation. So a certain amount of adult training is done in our own schools.

Mr. JENSEN. I shall never forget when our committee was on a tour of Alaska and we visited an Indian school where they were supposed to teach vocational training. We expected to see machines there of every nature, and what did we find? We found teachers, white people, who were teaching folks how to build canoes and sleds and everything which the Indian knew much better how to build than the white man who was trying to teach them.

Mr. GREENWOOD. Where was that, at Wrangell?

Mr. JENSEN. Yes, that was at Wrangell. We gave that outfit quite a lecture. Now, I wonder if that program is still going on. Do you know anything about it?

Mr. GREENWOOD. No, I do not know whether it is or not. Do you know Mrs. Thompson whether they still have the Marine program there at Wrangell?

Mrs. THOMPSON. No, sir, not at Wrangell. We do some training at Mount Edgecumbe, but I think you will find that it is all by people who know how to build boats and who have had experience with building and operating their own boats.

Mr. JENSEN. We did not think it was necessary to go to Alaska to teach those folks how to build boats, snowshoes, and a lot of other stuff. We hoped they would teach them how to do carpenter work, how to build homes and how to repair machinery, but they were trying to teach those Indians how to build things that they knew better how to build than the people who were trying to teach them. It was simply a lot of lost motion, and a lot of lost dollars. That kind of business, of course, cannot be countenanced.

BRIGHAM CITY COMMUNITY SCHOOL

Mr. BUDGE. Mrs. Thompson, I note in here an item about the Brigham City community school, 2,150 students. How does that fit in with the Bureau's program of attempting to get students into the local schools rather than into Bureau schools?

Mr. THOMPSON. These children at Brigham City are youngsters from 12 to 18 years of age who have either not been in school at all, or who are 2 or 3 grades retarded, so the program planned there is not the type of program carried on in the ordinary public school.

It is a program which, in 5 years, aims to make these youngsters literate, and to fit them with one salable skill so that they can find employment off the reservation. Intermountain School has not yet graduated anyone from that 5-year course as they have not been in operation that long. Some schools carry on a similar program, though, and the record over the past 2 years of those who were graduated shows that a little more than three-fourths of them are employed off the reservation. In other words, they are employed in industrial centers like Los Angeles and Oklahoma City, plus industrial centers near the school.

Mr. BUDGE. Of course, that could happen if they had gone to the public schools just as well, you know.

Mrs. THOMPSON. If they had had the opportunity at 6 years of age to go through the regular public-school curriculum, yes, but these youngsters are 12 to 18 years old, and many of them never have been inside a school before. This is strictly a 5-year vocational program.

INTERMOUNTAIN SCHOOL

Mr. GREENWOOD. You might be interested also in knowing that the Intermountain School was formerly an Army hospital. Senator Watkins of Utah conceived the idea of utilizing that as a means for providing schooling for the overage children of the Navajo Reservation where no school facilities existed. It was part of the program of providing some way to give schooling to Navajo youngsters of school age in the vocational program.

Mr. BUDGE. I assume that is a boarding school?

Mr. GREENWOOD. It is a boarding school; yes, sir.

Mr. BUDGE. Of course, my thinking has been that the only way we can assimilate the American Indians is to get them into the public schools, and I am just wondering whether this program is not just the reverse of that.

Mr. GREENWOOD. As Mrs. Thompson has indicated, this is a special situation and a special program designed in this 5-year period to give them sufficient literacy and sufficient schooling so that they can go out into the white communities.

Mr. BUDGE. What is the cost per student at that school?

Mr. GREENWOOD. Our per capita allowance, I believe, is $935. That is a little higher than it is for our ordinary boarding school, but the additional cost is due to the fact that we are conducting a special vocational program there and also due to the fact that it is a large institution. It we were building it from scratch we would never build that type of plant which is a little more expensive to operate than a regular boarding school would be if we designed a building for that purpose.

TRAILER SCHOOLS

Mr. BUDGE. Now, referring to this trailer unit program, as I understood, you have an average of about 20 students in each one of those?

Mrs. THOMPSON. Yes, sir.

Mr. BUDGE. You have four in operation and there will be another one next week?

Mrs. THOMPSON. In the next week or two.

Mr. BUDGE. What is the cost now per student for those approximately 100 students?

Mrs. THOMPSON. I could not give that figure offhand. It would be the cost of the teacher plus the cost of the help for preparing the noonday lunch and the cost of the lunch.

Mr. GREENWOOD. We are allowed $675 per child for the operation of those schools.

Mr. BUDGE. Is that program to be expanded?

Mr. GREENWOOD. No, not in the immediate future. I think we would need to have some experience back of us first.

Mr. BUDGE. With only 100 children you are not making much of an impression on the Indian children population.

Mr. GREENWOOD. It is more or less an experiment.

Mr. BUDGE. It seems to me that is a very expensive operation.

ADULT VOCATIONAL TRAINING

Mr. JENSEN. There is $2,207,500 for adult vocational training in the budget this year.

In as few words as you can explain this item, and I wish you would tell the committee just how you expect to use it.

Mr. GREENWOOD. We would make contracts with vocational schools under which they would take in these adult Indians for training.

We would pay the tuition. We would aslo pay at least part of the cost of subsistence, if not all of it, and, where necessary provide whatever tools or other items were needed in the instructional program.

Mr. JENSEN. Now, what type of Indians do you expect to take into this program? What age group?

Mr. GREENWOOD. It would be the overage group; most of them, I would imagine, would run from 20 to 40. We really have not considered placing any age limit on it. If the person were interested in obtaining outside employment and he lacked the necessary skill and was in good physical condition, I think we would take him regardless of his age.

It is a means of siphoning off the reservation areas the surplus population in order to enable the remaining population to maintain a decent standard of living on the basis of the resources available to them. It also facilitates this matter of integrating the Indian into the white population.

RELOCATION OF INDIAN FAMILIES

Mr. JENSEN. Did you ever give any thought to asking the chambers of commerce of the Nation in the smaller towns—say, towns of 2,500 population or less—to take an Indian family and be responsible for that family, to see that the family gets along, so to speak? Did you

ever consider doing that instead of sending these families to the larger cities where I am afraid they are going to migrate to the slum areas, or too many of them will, and where no one is personally interested in them except their employers?

I have been thinking about that for quite some time, and the reason I have been thinking about it is this, I live in a little town of 1,250 people. We have 200 people in that town with Indian blood.

We never think anything about it. They used to live in one section of the town when I was a kid. They, of course, went to our regular school, and as time went on they married into the white families, and now Indian blood is almost lost in that community. We never give it a thought any more as to whether that person is part Indian or not.

Now, we have a little factory in that town that employes 60 or 70 people, and I am sure that the owner of that plant would be only too glad to hire an Indian or two and never think a thing about it, and that the Indian family's neighbors would take an interest in them. If they were sick, they would see to it that they were taken care of. They would soon amalgamate into the white families, and the Indian problem would be eliminated.

Now, I am thoroughly convinced, after giving this a lot of thought and talking to a lot of people about it, that that is the way to distribute the Indian population today; that is the safe way of doing it, the best way, and the cheapest way by a great degree.

Mr. GREENWOOD. You are right; there is no lack of employment opportunities for these people. We have received some very glowing reports from employers who have taken large numbers of Indians. Our problem is getting them there and assisting them until they can draw their first couple of pay checks.

Mr. JENSEN. That is why I say that the problem of getting an Indian family into a small town of less than 2,500 people would just be so simple that it would be no chore at all, and the expense of doing it would be very small in comparison to sending them into the large cities. After they were there, they would soon make friends. They would stay there, and they would be with the best kind of people in America, the people in the small communities, not because they are any better than other people, but because they take more interest in their neighbors. They have not forgotten the neighborly spirit. They look after each other; they still do in the small towns of our great America; they feel responsible for each other. If one neighbor lets another neighbor lay ill or in want of anything, that person is an outcast in society in the small towns of this country today. They just do not do it. So they look after their neighbors, and they would look after these Indian families just like they would look after another brother of the human race.

Mr. GREENWOOD. I think you are entirely right that the people in the smaller communities are much closer knit than they are in the larger urban areas.

Mr. JENSEN. And they kind of see to it that their neighbors live up to the traditions of our great way of life, but they do not impose it on them.

Mr. GREENWOOD. Yes.

Mr. JENSEN. They just do it naturally, and that is why I do not favor this idea of sending Indians into the big cities where nobody says,

"Hello, John; how are you this morning?" and they pass them up like a pay train would a tramp. The first thing you know, they get homesick and they go back to the reservation.

I hope that you folks will do some thinking about this, you folks in the Indian Bureau, and see what you can bring up in the very near future to see if we cannot try it out.

I am satisfied that there are chambers of commerce all over this country by the thousands that would say, "Sure; we will be happy to sponsor an Indian family in our little town."

ADULT VOCATIONAL TRAINING PROGRAM ELIMINATED IN REVISED BUDGET

Mr. GREENWOOD. Before we leave that, I think we should mention that the adult training program will be eliminated in the revision of the budget. The entire amount of $2,207,500 is included in the revision.

Mr. JENSEN. I did not know that.

Mr. GREENWOOD. Yes, sir.

Mr. JENSEN. I failed to catch that in your reported revision.

Mr. GREENWOOD. We will have available in 1954 the same amount that we have this year, $579,600, which does not involve expenditures for the adult vocational training program.

Mr. JENSEN. Thank you.

RESOURCES MANAGEMENT

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$12,034,360	$13,253,760	$16,504,080
Prior year balance available		47,794	
Reimbursements from non-Federal sources	18,548	19,800	34,800
Reimbursements from other accounts	59,600	5,000	5,000
Total available for obligation	12,112,508	13,326,354	16,543,880
Balance available in subsequent year	−47,794		
Unobligated balance, estimated savings	−208,774		
Obligations incurred	11,855,940	13,326,354	16,543,880

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
1. Forest and range lands	$1,815,253	$2,223,913	$2,550,000
2. Fire suppression	241,791	140,000	140,000
3. Agricultural and industrial assistance	1,745,355	1,838,982	2,119,080
4. Soil and moisture conservation	1,500,171	2,421,672	3,200,000
5. Operation, repair, and maintenance of Indian irrigation systems	841,500	854,000	854,000
6. Repair and maintenance of roads and trails	2,322,447	2,270,000	2,646,000
7. Development of Indian arts and crafts	40,990	44,513	45,000
8. Management of Indian trust property	1,231,745	1,346,100	2,000,000
9. Repair and maintenance of buildings and utilities	1,802,793	1,862,374	2,650,000
10. Weed control	235,747	300,000	300,000
Total obligations from appropriated funds	11,777,792	13,301,554	16,504,080
Reimbursements from non-Federal sources:			
11. Replacement of personal property sold	18,548	19,800	34,800
Total direct obligations	11,796,340	13,321,354	16,538,880

Obligations by activities—Continued

Description	1952 actual	1953 estimate	1954 estimate
Obligations Payable Out of Reimbursements From Other Accounts			
1. Forest and range lands	$3,127	$5,000	$5,000
4. Soil and moisture conservation	1,077		
6. Repair and maintenance of roads and trails	54,127		
9. Repair and maintenance of buildings and utilities	1,269		
Total obligations payable out of reimbursements from other accounts	59,600	5,000	5,000
Obligations incurred	11,855,940	13,326,354	16,543,880

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	1,437	1,539	1,783
Full-time equivalent of all other positions	554	633	876
Average number of all employees	1,820	2,091	2,597
Average salaries and grades:			
General schedule grades:			
Average salary	$4,428	$4,456	$4,472
Average grade	GS-6.6	GS-6.6	GS-6.6
Crafts, protective, and custodial grades:			
Average salary	$3,775	$3,891	$3,955
Average grade	CPC-6.8	CPC-7.1	CPC-7.1
Ungraded positions: Average salary	$3,289	$3,301	$3,324
Direct Obligations			
Appropriated funds:			
01 Personal services:			
Permanent positions	$5,497,836	$6,364,014	$7,569,316
Part-time and temporary positions	1,592,552	1,814,843	2,569,772
Regular pay in excess of 52-week base	21,145	24,183	29,114
Payment above basic rates	50,192	37,451	44,658
Total personal services	7,161,725	8,240,491	10,212,860
02 Travel	293,241	369,581	465,984
03 Transportation of things	89,263	106,067	130,317
04 Communication services	58,966	69,017	77,823
05 Rents and utility services	228,851	187,009	214,999
06 Printing and reproduction	7,450	8,655	8,655
07 Other contractual services	1,130,854	1,546,565	1,845,709
Services performed by other agencies	1,445	68,870	30,670
08 Supplies and materials	2,284,040	2,102,099	2,705,651
09 Equipment	695,304	805,777	1,031,659
10 Lands and structures	3,142		
11 Grants, subsidies, and contributions	52,000	52,000	52,000
13 Refunds, awards, and indemnities	4,571		
15 Taxes and assessments	421	3,563	3,650
Subtotal	12,011,273	13,559,694	16,779,977
Deduct charges for quarters and subsistence	233,481	258,140	275,897
Total obligations from appropriated funds	11,777,792	13,301,554	16,504,080
Reimbursements from non-Federal sources:			
09 Equipment	18,548	19,800	34,800
Total direct obligations	11,796,340	13,321,354	16,538,880
Obligations Payable Out of Reimbursements From Other Accounts			
07 Other contractual services	43,075	5,000	5,000
08 Supplies and materials	16,525		
Total obligations payable out of reimbursements from other accounts	59,600	5,000	5,000
Obligations incurred	11,855,940	13,326,354	16,543,880

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$1,734,637	$2,124,886	$2,405,440
Obligations incurred during the year	11,855,940	13,326,354	16,543,880
	13,590,577	15,451,240	18,949,320
Deduct:			
Reimbursable obligations	78,148	24,800	39,800
Adjustment in obligations of prior years	14,886		
Unliquidated obligations, end of year	2,124,886	2,405,440	3,009,520
Total expenditures	11,372,657	13,021,000	15,900,000
Expenditures are distributed as follows:			
Out of current authorizations	9,754,885	11,021,000	13,600,000
Out of prior authorizations	1,617,772	2,000,000	2,300,000

BUDGET REVISIONS

Now we turn to "Resources management." We will insert page 45 of the justifications into the record. Now tell us what your revised budget calls for in each one of these items.

(The matter referred to follows:)

Analysis by activities

Activity	Appropriated, 1953	Base, 1954	Estimate, 1954	Increases
1. Forest and range lands	$2,176,119	$2,176,119	$2,550,000	$373,881
2. Fire suppression	140,000	140,000	140,000	
3. Agricultural and industrial assistance	1,838,982	1,838,982	2,119,080	280,098
4. Soil and moisture conservation	2,421,672	2,421,672	3,200,000	778,328
5. Operation, repair, and maintenance of Indian irrigation systems	854,000	854,000	854,000	
6. Repair and maintenance of roads and trails	2,270,000	2,270,000	2,646,000	376,000
7. Development of Indian arts and crafts	44,513	44,513	45,000	487
8. Management of Indian trust property	1,346,100	1,346,100	2,000,000	653,900
9. Repair and maintenance of buildings and utilities	1,862,374	1,862,374	2,650,000	787,626
10. Weed control	300,000	300,000	300,000	
Total	13,253,760	13,253,760	16,504,080	3,250,320

FOREST AND RANGE LANDS

Mr. GREENWOOD. For forest and range lands there was no revision in the original budget estimate, which will provide a total of $2,550,000 for this work.

Mr. JENSEN. Just what is this work?

Mr. GREENWOOD. This work consists of the management of Indian forest and range lands, including the preparation of timber-management plans, conducting sales, cruising timber, and marking timber for sale, and in connection with range management the determination of the carrying capacity of the range and managing or controlling the use of the range.

FIRE SUPPRESSION

Mr. JENSEN. All right. What about fire suppression?

Mr. GREENWOOD. There is no change in the fire-suppression item, Mr. Chairman. That remains at $140,000.

Mr. FLORY. It may be of interest to the committee to know that they make a 10 percent deduction for the sale of timber, and that goes into the General Treasury; $471,000 went into the Treasury last year from that fund.

Mr. JENSEN. Good.

AGRICULTURAL AND INDUSTRIAL ASSISTANCE

What about agricultural and industrial assistance?

Mr. GREENWOOD. The reduction in that item, Mr. Chairman, is $160,000. That reduction is applied against the additional staff for administering the credit program and also against the program-planning activity.

Now, this item agricultural and industrial assistance covers several different activities.

One is the agricultural extension work, which is done through extension agents, farm agents, and home extension workers.

The second is the personnel that is administering the credit program.

The third is the economic development work, which is largely part of the Navajo-Hopi program in that it provides funds for surveys of physical resources on the Navajo and for financing the development of business enterprises and industries.

The fourth activity under this heading is program-planning work. That was initiated about 2 years ago and is directed toward compiling data and preparing plans for the withdrawal of Bureau services.

SOIL AND MOISTURE CONSERVATION PROGRAMS

Mr. JENSEN. The next item is "Soil and moisture conservation." What happened to that item?

Mr. GREENWOOD. There is no revision in that item.

Mr. JENSEN. Off the record.

(Discussion off the record.)

Mr. JENSEN. Mr. Flory, will you tell us what you are going to use this extra money for that you are requesting in 1954 over 1953?

Mr. FLORY. During the past year, Mr. Chairman, we were able to put a program on 12 reservations where we had no program before at all.

Mr. JENSEN. On 12?

Mr. FLORY. Yes, sir; and we were just able to start them in many cases, get men on the ground, and organize an Indian conservation group and initiate a soil survey.

We have not had the necessary assistants to go into the active program yet, and the increase which is asked for is to make it possible to get into effect a full conservation program which is being demanded by the Indians.

They have become so convinced of the benefits that they can derive from the conservation program that they have geen after us for several years after our making original contacts and wondering why we had not undertaken a program on their reservations. That is what the increase is for.

It is centered in the Aberdeen area, Sisseton, Turtle Mountain, Cheyenne River, Fort Berthold, Pine Ridge, Rosebud, Standing Rock.

Mr. JENSEN. I think we can simplify that by putting your list into the record.

Mr. FLORY. All right. That shows by grade and training what we will need.

Mr. JENSEN. We will put those pages you have in your hand in the record along with the tables on pages 57 through 61.

(The matter referred to follows:)

DISTRIBUTION OF 47 ADDITIONAL POSITIONS ALLOWED BY BUREAU OF BUDGET INCREASES IN FUNDS FOR 1954 SOIL CONSERVATION

1 GS–11 agricultural engineer: 1 Aberdeen.
3 GS–9 soil conservationists: 2 Aberdeen, 1 Muskogee.
1 GS–9 agricultural engineer: 1 Anadarko.
1 GS–9 soil scientist: 1 Albuquerque.
23 GS–7 positions: 6 Aberdeen, 5 Albuquerque, 1 Anadarko, 6 Billings, 1 Minneapolis, 1 Muskogee, 1 Phoenix, 1 Portland, 1 Window Rock.
8 GS–5 positions: 1 Anadarko, 1 Minneapolis, 1 Muskogee, 2 Phoenix, 1 Portland, 2 Window Rock.
5 GS–4 positions: 4 Aberdeen, 1 Muskogee.
3 GS–3 positions: 2 Albuquerque, 1 Window Rock.
2 GS–2 positions: 2 Window Rock.
Total, 47 positions.

SOIL AND MOISTURE CONSERVATION

DISTRIBUTION OF 47 ADDITIONAL POSITIONS ALLOWED BY BUREAU OF BUDGET INCREASE IN FUNDS

Aberdeen area:	
GS–11, agricultural engineer: Aberdeen area office	1
GS–9, soil conservationists: Sisseton, Turtle Mountain	2
GS–7, Cheyenne River, Fort Berthold; 2 Pine Ridge, Rosebud, Standing Rock	6
GS–4, Cheyenne River, Pine Ridge, Rosebud, Sisseton	4
Total	13
Albuquerque area:	
GS–9, soil scientist: Albuquerque area office	1
GS–7, United Pueblos	5
GS–3, Jicarilla, United Pueblos	2
Total	8
Anadarko area:	
GS–9, agricultural engineer: Southern Plains	1
GS–7, Southern Plains	1
GS–5, Southern Plains	1
Total	3
Billings area:	
GS–7, Blackfeet, Crow, Flathead; Fort Peck, Northern Cheyenne, Wind River	6
Total	6
Minneapolis area:	
GS–7, Red Lake	1
GS–5, Red Lake	1
Total	2
Muskogee area:	
GS–9 soil conservationist: Five Civilized Tribes	1
GS–7, Five Civilized Tribes	1
GS–5, Five Civilized Tribes	1
GS–4, Five Civilized Tribes	1
Total	4
Phoenix area:	
GS–7, Nevada	1
GS–5, Nevada, Papago	2
Total	3

DISTRIBUTION OF 47 ADDITIONAL POSITIONS ALLOWED BY BUREAU OF BUDGET INCREASE IN FUNDS—continued

Portland area:	
GS–7, Colville	1
GS–5, Yakima	1
Total	2
Window Rock area:	
GS–7, Navajo	1
GS–5, 2 Navajo	2
GS–3, Navajo	1
GS–2, Hopi, Navajo	2
Total	6
Grand total	47

Source of funds and degree of participation in the soil and moisture conservation program, Bureau of Indian Affairs

Fiscal year	Funds available for soil and moisture conservation work					
	Soil and moisture conservation		Cooperator		Total	Accumulative total
	Expenditures	Percent	Expenditures	Percent		
1941	$848,238	47	$928,150	53	$1,776,388	$1,776,388
1942	722,304	43	930,090	57	1,652,394	3,428,782
1943	437,839	45	530,135	55	967,974	4,396,756
1944	477,891	37	817,893	63	1,295,784	5,692,540
1945	416,701	30	992,248	70	1,408,949	7,101,489
1946	521,437	31	1,167,049	69	1,688,486	8,789,975
1947	572,217	25	1,755,036	75	2,327,253	11,117,228
1948	836,195	29	2,015,688	71	2,851,883	13,969,111
1949	1,236,363	25	3,664,862	75	4,901,225	18,870,336
1950	1,256,973	12	9,581,100	88	10,838,073	29,708,409
1951	1,561,470	14	9,602,782	86	11,164,252	40,872,661
1952	1,501,248	13	10,305,583	87	11,806,831	52,679,492
1953 estimate	2,421,672	16	12,702,000	84	15,123,672	67,803,164
Total, 1941–53	12,810,548	19	54,992,616	81	67,803,164	
1954, estimate	3,200,000	16	17,427,700	84	20,627,700	

1954 soil and moisture conservation program by major subactivities, Bureau of Indian Affairs

Major subactivity	Soil and moisture conservation costs estimate		Cooperators costs estimate		Total costs estimate	
	1953	1954	1953	1954	1953	1954
Total	$2,421,672	$3,200,000	$12,702,000	$17,427,700	$15,123,672	$20,627,700
1. Land-use adjustments and arrangements	619,000	720,000	635,000	718,000	1,254,000	1,438,000
2. Soil stabilization and improvement	623,000	856,500	8,574,000	10,963,000	9,197,000	11,819,500
3. Water control	610,000	854,500	1,232,000	2,475,300	1,842,000	3,329,800
4. Water supply and utilization	444,000	608,500	2,160,000	3,125,000	2,604,000	3,733,500
5. Performance inventory	125,672	160,500	101,000	146,400	226,672	306,900

Soil and moisture conservation accomplishments

Practice	Unit	1945	1947	1949	1951	1952
1. Land-use adjustments and arrangements:						
Land classified	Acres	1,160,845	658,867	512,970	1,923,372	420,328
Farms planned	Number	562	2,994	3,980	9,186	9,435
2. Soil stabilization and improvement:						
Brush control	Acres	1,975	1,138	9,585	32,124	29,042
Contouring	do	22,963	77,612	114,691	248,110	215,650
Cover crops	do	20,594	36,610	61,814	135,675	167,584
Crop improvement	do	3,172	8,884	26,184	40,320	51,939
Crop residues	do	37,784	37,961	165,894	436,547	582,149
Deep plowing	do	1,934	5,513	11,657	19,540	21,900
Fertilizers	do	5,209	15,010	50,269	193,064	220,578
Rotations	do	90,326	677,536	686,937	790,501	2,186,827
Rough tillage	do	27,369	51,492	70,436	89,381	82,759
Seeding sodding	do	16,801	84,593	35,921	55,193	54,251
Soil amendments	do	1,612	4,547	23,043	13,960	17,935
Stripcropping	do	3,282	14,870	63,139	160,527	262,414
3. Water control:						
Drainage	do	3,154	2,063	7,532	16,096	7,930
Detentions	Number	3	17	32	59	99
	Cubic yards	54,290	45,263	93,331	513,498	474,445
Dikes	Miles	48	391	191	43	73
	Cubic yards	269,481	282,794	91,873	571,499	456,561
Jetties	Number	7,318	4,015	1,777	5,910	5,908
Terraces	Miles	161	395	338	540	412
Upland water wasteways	do	37	53	66	154	104
4. Water-supply utilization:						
Diversions	Number	1,296	721	126	678	1,286
	Cubic yards	446,088	1,467,875	229,136	1,549,244	1,748,463
Water spreading	Acres	15,890	60,121	37,821	57,260	59,641
Leveling	do	924	1,755	2,949	12,879	5,952
Water distribution	do	16,080	8,520	5,280	28,113	18,777
Ponds	Number	426	319	208	797	806
	Cubic yards	1,543,959	1,076,494	434,875	2,169,363	2,854,845
5. Performance inventory	Number	1,360	5,583	11,279	21,139	17,326
	Acres	1,730,837	3,838,589	3,197,681	13,806,861	9,761,267

Comparison of analyses of results of applying soil- and moisture-conservation practices at 17 agencies

	1950	1951	1952
Increased returns per acre due to conservation treatment:			
Amount per acre	$4.54	$4.95	$5.72
Percent	30.5	37.17	38.4
Acres treated	4,051,820	5,055,237	5,985,046
Total increased production	$18,395,000	$25,031,000	$34,234,000
Expenditures:			
Soil-conservation funds	$677,238	$719,351	$700,673
Cooperator funds	$4,995,924	$6,288,481	$6,739,829
Ratio of soil-conservation dollar to cooperator expenditures	1.00:7.38	1.00:8.74	1.00:9.62
Ratio of cooperator dollar to soil-conservation expenditures	1.00:0.14	1.00:0.11	1.00:0.10
Increased farm production:			
Ratio of soil-conservation dollar to increased production	1.00:27.15	1.00:34.80	1.00:48.85
Ratio of cooperator dollar to increased production	1.00:3.68	1.00:3.98	1.00:5.08
Ratio of total cost of soil conservation (soil-conservation dollar plus cooperator dollar) to increased production	1.00:3.24	1.00:3.57	1.00:4.60

ACCOMPLISHMENTS OF PROGRAM

Mr. JENSEN. Now, Mr. Flory, will you take an individual reservation, a specific reservation, so to speak, and tell us what you have been able to accomplish in soil and moisture conservation on that reservation over the past several years?

Mr. FLORY. There are several different ones that could be taken. I will just mention 2 or 3 and then describe them.

The Winnebago Reservation in Nebraska has shown very marked success in raising the yield and the income from the lands.

Mr. JENSEN. How many cooperators do you have?
Mr. FLORY. I could not say right now, but I think about 1,200.
Mr. JENSEN. 1,200?
Mr. FLORY. I think it is something like that.
Mr. JENSEN. Indian families?
Mr. FLORY. Not entirely, partly.
Mr. JENSEN. Yes.
Mr. FLORY. I do not have a breakdown of that.

An agency where we have all Indian cooperators is the Cherokee Agency in North Carolina. The amount of progress that has been made there is just almost unbelievable. I think there was about 12 percent of those Cherokees in the war. That was most of the able-bodied men, and while they were gone their little farms grew up in brush. The old people were the only people left, and their dependency allotments permitted them to get along while the boys were gone. So, they did not do too much and when the boys came back home they were faced with the prospect of making a living on farms of from 2 to 20 acres of land, very small farms. A veterans' training program was organized. We had about an average of 85 boys taking agriculture, and the basic text or laboratory of their course was their farm plan. The instructor helped them to make farm plans of conservation for their own farms. The instructors and all worked together in teaching them how to make their farm plans. Each instructor was responsible for 16 to 20 farms. Each of those 5 teachers spent 4 hours on each one of those farms, half a day every 2 weeks. The boys came into the classes once a week. There was 1 boy who walked 15 miles every week in order to come into those classes. They had pretty good sized families and they did not have any money and the people were on a very low economic level. The mountaineer people in the Smoky Mountains generally are on a low economic level, but the Indians were at a lower level than most of the mountaineers.

One of the first things we concentrated on was getting a cow for the family.

They did not get a cow until they had developed a pasture, an improved modern pasture with fertilization with mixed clovers and grass in full production through the season.

We assured that those pastures were properly managed by seeing to it that they were properly fenced into three parts before a cow was ever secured. These fellows got a pension through veterans' training every month, and part of that was taken to pay for improvements on their places.

One of the curses of the South have been that they grew corn, cotton, and tobacco and then left the land lay exposed through the whole year to wash away.

The Cherokee land was the same. So a program of winter legumes, cover crops was instituted, clover and hairy vetch. Those were the most common ones used. That was instituted until now it is exceptional when a piece of land that has cotton, corn, or tobacco on it goes through the winter without a cover crop on it. Of course, in order to get rundown land to produce a cover crop you have to put on lime and phosphate.

In 1946, when we started the program down there, 99,000 pounds of commercial fertilizer was being used. In 1952 there were 633,000 pounds of commercial fertilizer used.

This land was so steep at many times they had to scatter the fertilizer and the lime by hand from a bucket. They had to haul it to the field by a sled sometimes pulled by oxen, because the land was so steep that a horse could not get along very well on it.

Now, I might take the case of an individual community to demonstrate the progress that was made.

The Cherokees were apathetic, more or less content with their miserable existence. They needed to be aroused to better their own lot before we could get them to do anything to improve and save their land.

There are six communities down there, and they established friendly competition. The tribe appropriated some money for prizes, and they got up a scorecard showing the progress which was achieved in making flowerbeds, planting land, painting houses, having a garden, and improving pasture. They put in hog pastures, which was absolutely unknown down there previously. They would just pen a hog up in a crate or fence him in. They have some nice looking hog pastures down there now.

One community that I will mention, Big Cove community, has just a little over 200 people there. Last year they had weekly community meetings, and they had an average attendance of 185, showing the interest that has been created in this program.

As a result of that competition, there were 22 homes painted last year in the Big Cove community, and they are very much isolated.

After they had improved their homes and had put in lawns, flowerbeds, gardens, and all that sort of thing, why, they wanted electricity.

It was 22 miles over the mountain to the nearest line. The utility company said, "We cannot afford to go into that community." "Well," they said, "how can we get you to come in?" They said it would take $2,500 to get them to. The tribal council appropriated $2,500 in cash. Then they said to them, "You folks will have to clear the right-of-way. It is tough with trees and brush on the mountains down there," and to put in a right-of-way there was tough work. Everybody in the community got out and worked on it. A month ago they had all of it but about 4 or 5 miles completed, and I think it is probably completed by now. So they have electricity coming into that community.

One Indian from this community was made a member of the State fair board last year, the North Carolina State Fair Board.

He won the first prize the last 2 years, $700 cash, with his conservation exhibit, and another Indian there won third prize last year with a $500 prize. Those people did not have any money with which to get conservation, and you have to start with fertilizer and lime on worndown, wornout land. So we started with the veterans' payments, and then, with the increased income, they got with these increased yields they get as a result of that, they put some of the additional money that they made back into their farms.

This man who got the $700 cash prize put the whole thing back into his farm. He knew what made his prize, so he put it back.

Mr. JENSEN. In other words, he decided that he wanted his savings in the soil rather than in the bank?

Mr. FLORY. He knew he could draw on it when it was needed.

Mr. JENSEN. Please elaborate on this for the record. Also tell us, for the record, what progress has been made in the soil and moisture conservation program on each reservation on which you operate.

Place it in the record and justify this additional request for money in this year's budget.

(The matter referred to follows:)

SUCCESS STORIES AND FIELD PRACTICES

ABERDEEN AREA

Fort Berthold (N. Dak.)

During the past year the Three Affiliated Tribes of the Fort Berthold Reservation joined with the ranks of the tribes with established soil-conservation enterprises. The enterprises are proving highly beneficial for soil conservation and to the Indians. In the case of the Three Affiliated Tribes, one of their big problems is the relocation of 286 Indian families as the result of the construction of the Garrison Dam on the Missouri. In their new locations on high ground many of these families are going to need ponds for the watering of their livestock. It was with this knowledge and background that the tribal business council passed a resolution on March 28, 1952, approving a plan of operations for the Three Affiliated Tribes soil and moisture conservation enterprise. The enterprise membership committee is composed of three members of the tribal business council. In this same resolution they authorized the advance and use of $5,000 of revolving credit funds as operating expenses for the enterprise. To provide equipment for this enterprise, the tribes purchased a D–6 caterpillar tractor, dozer, scraper, and winch, with tribal money, at a cost of $18,000.

The equipment was not received until well up in the year and the following does not indicate what a full year's operation would be. The accomplishments of the enterprise for this past year are as follows: Ten stockwater dams completed, two spring developments and additional relocation work, such as digging basements. Roughly figuring that each water development served the range for a radius of 1 mile means that approximately 30,000 acres of grassland were utilized that had not been previously used. The common figure for a stocking rate on the reservation is 25 acres per animal unit. This means that 1,200 cattle used this part of the range that otherwise would not have been used. Computing on the basis of a 6 months' grazing period and an average gain of 250 pounds per animal means that 300,000 pounds of beef were produced. At current prices, this would mean about $75,000 gross profit.

In connection with this water development, individual Indian operators contributed $2,000 and they received $3,000 from PMA payments. The enterprise equipment charges 14 cents per cubic yard of dirt moved and of this PMA pays 8 cents per yard and the ranch operator 6 cents per yard.

Estimates of work to be accomplished in the future are the construction of 190 additional stockwater ponds and 100 spring developments. There are over 50 Indian cattle operators signed up with PMA for water developments for the coming year.

The enterprise is not limited to water development but is so organized that it can be used as a medium through which the Indian people can work to secure much needed plantings of trees to serve as shelterbelts for themselves and their cattle, establishment of tame pastures and meadows to supplement their native hay meadows, needed conservation measures on their cultivated lands and conservation practices on their grassland.

Over and above the tangible results of this tribal conservation enterprise is the Indian people's feeling that this is their own organization. They purchased the equipment, they can say how it is to be used through their elected representatives and each individual that cooperates is spending his own money and time.

Quoting from Martin Cross, the tribal chairman of the council, "We will find that as we move away from this valley, the soil on the residual area will not return yield of crops or gardens as good as here, so in order to overcome this handicap, soil conservation practices will become a good habit."

Pine Ridge (S. Dak.)

During the past year at Pine Ridge a sweetclover planting program was launched. Every year the need has been increasing for a rotation including legume green manure crops. In the past these agricultural lands generally have been operated on a soil-depletion basis of raising a cash crop by alternate wheat fallow. It only has been during the last decade that farmers have ceased the practice of burning the wheat stubble and have started incorporating stubble into the soil by trashy tillage. Prior to the cessation of burning no vegetative material was returned to the soil.

Last year the Pine Ridge farmers purchased and planted 50,000 pounds of sweetclover seed. The educational work had so convinced the farmers that they purchased a very large portion of it for planting on their own private lands. In addition to normal means of planting on the ground some of the farmers contracted seeding by plane at a cost of 80 cents per acre. The planting of legumes should accomplish much in revitalizing the Pine Ridge farm lands.

Rosebud (S. Dak.)

At Rosebud there are many expressions of the progressive soil-conservation program that is in operation. Some of these are:

1. Detailed soil surveys and land classification have been completed on 100,000 acres of land. The agency requires detailed soil surveys and land classifications on all tracts of land prior to appraisal for sales, purchases, and exchanges.

2. Farmers 3 years ago considered sweetclover a weed; now they are rotating its planting from field to field so that all their cultivated land is planted with it every 4 years. They are finding that as a soil-building crop a legume in rotation increases their yield of wheat and corn 10 to 15 bushels per acre. The trend in sweetclover plantings is shown by acres planted: 1948, 500 acres; 1949, 700 acres; 1950, 1,000 acres; 1951, 2,000 acres; 1952, 7,000 acres.

3. Trashy tillage is replacing clean tillage: Acres trashy tilled: 1948, 7,000; 1950, 16,000; 1952, 60,000.

4. In the last 4 years 56,800 acres of prairie-dog towns have been poisoned. This has been a cooperative project of the Rosebud tribal soil conservation enterprise, the Fish and Wildlife Service, and the Bureau with the land owners and users. Here are the statistics:

Year	Operators served	Acres treated	Pounds of bait used
1949	33	2,800	2,000
1950	55	23,000	7,900
1951	50	21,000	7,500
1952	75	10,000	3,000

Standing Rock (N. Dak. and S. Dak.)

The soil-conservation program has been in operation at the Standing Rock Agency for 4 years and has had a decided effect on agricultural operations in that area as shown by the following:

	1949	1950	1951	1952
Strip cropping.....acres..	18,360	60,410	65,872	71,214
Contouring.....do....	590	1,254	2,492	3,448
Upland waterways.....miles..	0	1.2	2.7	4.6

In 1949 the work started practically from scratch. Now stripcropping is practiced on virtually 100 percent of the cultivated land. Contouring has not only increased yields but has been so effective in increasing water penetration that areas of potholes are now dry and are producing crops.

Winnebago (Nebr.)

All of the 845 leases on Indian land at the Winnebago Agency with approximately 56,275 acres now have soil-conservation stipulations attached to the leases. They have been revised and improved to the point where all simple and necessary conservation practices are included. Most of the farmers are doing a fine job in carrying out these provisions. The Indian owners have become very conscious of the conservation provisions and are alert to any noncompliance.

Legumes are utilized as green-manure crops on all bottom land every third year and on all hill land every other year. As a result, in 1952, 27,500 acres were planted to sweetclover and 20,000 acres of second-year clover were plowed under as a green-manure crop to be followed by one of the best corn crops in history.

Contouring is next to clover in preventing erosion and increasing production. Farmers who at first were very skeptical of contouring now believe in it. The change is reflected in the acreage contoured of 6,480 acres in 1950, 30,000 in 1951, and 32,830 in 1952. In 1952 all cropland above 5 percent was managed on the contour.

More grassed waterways are being constructed every year. In 1952, 9 miles of waterways were installed, bringing the total to 83 miles. Farmers are finding that the rich soil trapped in the waterways is most productive. It is bringing them returns of as much as $100 to $150 in the form of hay, forage, and increased efficiency in operating on the adjoining cultivated portions of the fields.

In the past year 30 miles of terraces have been constructed. All turnrows and fencerows are being seeded to grass on land with a slope of 5 percent or more with a minimum width of 12 feet and many operators using 20–30 feet.

Conservation is adding new life to the land, stability to the community, and dollars to the pockets of landowners and operators, as shown by the following chart, which shows production increases due to conservation farming:

Crop	With no conservation		With 5 years of conservation		Increase per acre
	Yield per acre	Value per acre	Yield per acre	Value per acre	
	Bushels		*Bushels*		
Oats	20	$16.00	40	$32.00	$16
Corn	25	$37.50	45	$67.50	$30

Increased financial gains resulting from the application of soil-conservation measures amounted to $1,196,000 in 1952 for the farmers and landowners operating the 52,000 acres of Indian farmland. Land operators spent $335,000 in carrying out their conservation measures, and the Federal Government spent $22,761 in providing technical assistance in the application of conservation measures.

Mr. Frank Beaver, chairman of the Winnebago Tribe, states: "We know that a great deal is being accomplished by the soil conservation department through such practices as terracing, striperopping, contouring, legumes, crop rotation, and others. * * * We want the present soil conservation program continued."

Mr. Amos Lamson, chairman of the Omaha Tribe, has said: "The soil-conservation practices are a great help in building up the soil to its natural strength of production. Much of the poor land should be seeded to grass and use fertilizer and rotation of crops."

ANADARKO AREA

Southern Plains (Okla.)

Cover crops are becoming increasingly popular in western Oklahoma, as shown by these Anadarko acreage figure plantings by years: Cover crops: 1948, 10,380; 1949, 23,121; 1950, 30,040; 1951, 47,522; 1952, 66,049.

Soil structure is improved; soil fertility is increased; blowing of soil is reduced; pasture is provided; and production yields are increased.

Kenneth Merritt, a lessee of Indian lands 7 miles northeast of Carnegie, Okla., found in his first year of planting vetch with wheat that he produced more wheat than where wheat was planted alone. In addition to producing 15 bushels of wheat, he obtained 350 pounds of vetch seed per acre, or $82. In 1951, which was a poor year for small-grain farmers, he obtained 7 bushels of wheat, which would have made many a farmer happy. In addition he received 275 pounds of vetch seed per acre worth $44. These results were obtained the same years vetch was grown. Increased production is shown by a field where he had had vetch 2 years. He planted peanuts and harvested 83 bushels per acre. This was the equivalent of a 100 percent increase.

In the fall of 1949 Glen Huff, lessee of Ponca allotment 125, planted hairy vetch fertilized with 200 pounds of 0–20–0 and plowed the cover crops under in May 1950. Whereas the land had been producing an average of 12 bushels of wheat per acre, in 1951 it produced 25 bushels of wheat, and in 1952, 40 bushels per acre.

The results of good conservation farming can be observed on an Indian lease operated by Roy Beagle, of Maramec, Okla. It is with pride and enthusiasm that Mr. Beagle tells of his accomplishments from conservation work.

This story begins in December of 1950, at which time Mr. Beagle contacted the Pawnee Soil Conservation Work Unit to go over his lease and work out a conservation plan. The conservation program was explained, and an appointment was made to go over the lease with Mr. Beagle. The agricultural engineer and soil conservationist visited Mr. Beagle's allotment on December 6, 1950, and found it to be in a very rundown condition. Some gullies on the 45 acres of cultivated

land were so deep in places it was dangerous to drive a tractor across them. Mr. Beagle had been raising oats and grain sorghums on the land, and his yields were down to from 16 to 20 bushels of oats per acre. After surveying the problems on this field, the engineer recommended that terraces be constructed as soon as possible, as there was a meadow and pasture at the end of the field on which terraces could spill.

In the spring of 1951, after plowing in all gullies so the field would be uniform again, Mr. Beagle used the SMC whirlwind terracing machine and constructed the terraces himself. The next step decided upon was to treat 30 acres of the field with sweetclover as a soil-improving crop. After testing, it was found that the soil was low in phosphate. Mr. Beagle seeded sweetclover and 200 pounds of phosphate (super) per acre in the drill row in 16-inch rows, alternating with oats in every other row. The oats were harvested in the summer of 1951 and showed a yield of 35 bushels per acre, or an increase of 15 bushels, which was contributed to the use of phosphate and contour farming.

In September 1951 Mr. Beagle turned 35 cows with calves on the clover, and they were left there until April 20, 1952, and were fed only a small amount of hay and no protein supplement at all. As he usually fed about $12.50 of supplement to each cow, this was a saving of $447.50, and his calves were sold weighing 50 pounds more than any he had ever sold before, which gave him another gain of $450 from the use of clover pasture.

In the summer of 1952 Mr. Beagle harvested 300 pounds of sweetclover seed per acre, which sold for 12 cents per pound. This would be $36 per acre, or a gain of $15 over oats before treatment. This would make another gain of $450 from this 30 acres over an oat crop before treatment.

After figuring the cost of terracing at $200 and fertilizer at $127.50, Mr. Beagle realized an increased income of $927.50 over a 2-year period and he raised only one crop.

After 2 years Mr. Beagle has reduced the erosion on this farm to a minimum, and he is happy to tell you his story of conservation and how it has been used to improve his land.

Mr. Beagle has lived on this lease for 20 years and has felt that he should have done some conservation work years ago, but he had not been able to receive the assistance needed until SMC began at the Pawnee Indian Agency. This is a good example of conservation of the soil being late, but not too late to save the farm.

Mr. Chester Terrell, Carnegie, Okla., farms 120 acres of Indian land located 3 miles east of Carnegie, Okla., on Highway No. 9. Mr. Terrell has been farming this Indian-owned tract for several years and his cropping system had been mainly wheat, cotton, and feeds. He had attempted to tend this land in the proper manner as far as possible when not using a definite soil and moisture program. He had attempted not to let severe damage occur on the lease; however, he could not see the damage being done to the soil by continuous cultivation.

In 1949 the personnel of the Indian service SMC began to impress upon Mr. Terrell the great need of a soil-improving legume crop. The soil on this lease is sandy and subject to wind erosion. The subsoil is heavy and impervious, thus retarding the intake of water. With these conditions there was a great need for a high-residue legume crop with a root system to penetrate the subsoil.

Biennial sweetclover was the answer to this problem because it is able to do both jobs at the same time. In the spring of 1950 Mr. Terrell planted 20 acres of his cropland to sweetclover and fertilized it with 200 pounds per acre of 0–20–0 at the time of planting. In the spring of 1951 Mr. Terrell pastured 15 head of cattle on this clover from March 15 to June 1 and then harvested 200 pounds of cloverseed per acre. In the fall of 1951 he planted this acreage to wheat, without the use of any fertilizer. In the summer of 1952 he harvested 20 bushels of wheat per acre.

The soil on this farm is sandy and not too well adapted to wheat, so the 20 bushels per acre is outstanding. Mr. Terrell says that this farm would do well to average up to 12 bushels per acre. With a production like this following sweetclover this lessee will be able to produce as much in 3 years as he would normally produce in 5 years, not counting his high return from pasture and cloverseed.

The average price to the producer on wheat in 1952 was approximately $2.20 per bushel. On this basis, this land produced $44 per acre. This is compared with $26.40 which is what the land would have produced per acre before the soil-improving practice was carried out. This is an increase in cash income of $17.60 per acre.

Mr. Terrell attributes these results to change in physical structure of the soil by addition of organic matter, shattering of subsoil by clover roots, thus enabling the soil to store up a larger reservoir of water to be used during periods of low rainfall, the addition of organic matter enabling the soil to hold more moisture and the addition of available nitrogen which is low in the sandy soils to the plants, thus producing a healthy plant.

After securing these results, Mr. Terrell is one farmer who makes use of all possible means to establish a planting of biennial sweetclover.

Osage (Okla.)

Ralph Whitehorn, an Osage Indian, had formerly leased his land on a short-term basis until 1948 when G. K. Sutherland, guardian for Ralph Whitehorn, gave W. A. Stephens a 5-year lease with an agreement that both Mr. Stephens and the Indian owner would carry out certain phases of a soil-conservation program under the supervision of the Indian Bureau Soil and Moisture Branch in cooperation with the Osage County Soil Conservation District.

Approximately 130 acres of the 355-acre farm was considered tillable land at that time, although most of it was badly eroded and low in fertility. Twenty acres were returned to permanent vegetation because it was so seriously damaged that it could no longer be cultivated. The other 110 acres were terraced, limed, treated with rock phosphate and on most of the succeeding crops some mixed fertilizer was used. Mr. Stephens constructed most of the terraces and bought all of the commercial fertilizer and the Indian owner limed and rock-phosphated the 110 acres.

Yields had been running about 10 bushels of wheat and 20 bushels of corn per acre, but gradually increased as the conservation practices were carried out to 20 bushels of wheat per acre and 55 bushels of corn per acre. One year, 16 acres of corn averaged 70 bushels per acre.

The conservation practices were put into effect over a period of 2 or 3 years, but if they had all been established in 1 year and if the total cost of the conservation program to the farmer and the PMA were charged against 1 year, the average gross increase in income per year would have more than paid the cost.

The following table shows the yields before and after treatment and the cost of treatments in more detail. Approximate present costs and prices were used in determining the values shown. The conservation cost includes the cost to the farmer and PMA:

Field No.	Area acres	Average gross income per acre per year		Conservation cost per acre [1]	Increase in gross income per acre
		Before treatment	After treatment		
1	76	$15.00	$66.00	$6.42	$50.58
2	16	33.60	88.00	9.10	78.90
3	18	8.00	34.00	7.04	26.96

[1] Conservation costs per acre shown are prorated, i. e., total cost per acre divided by 5 to spread out on a yearly basis for the 5-year lease.

Considerably more net profit is now being realized from the 110 acres than was previously obtained from 130 acres.

Fertile bottom lands in many instances fail to produce the maximum of suitable crops by reason of flooding. Near Fairfax, Okla., on the Osage there is a 50-acre field where such failures occurred by floodwaters from the surrounding drainage area gushing across the field and washing out and drowning the planted crops. In the spring of 1950, Mr. Lester Williams installed a detention dam and water wasteway. A 12-inch drawdown pipe was placed near the bottom of the reservoir to discharge the water without damaging effect. In the fall of 1950, Mr. Williams spread 1 ton of limestone, 500 pounds of rock phosphate, and 100 pounds of superphosphate per acre and seeded 20 pounds of alfalfa per acre. The total cost for all features was $967.50 for the field or $19.35 per acre. In 1952 Mr. Williams made 3 cuttings of alfalfa averaging 1 ton per acre at each cutting which he sold for $40 per ton. The gross income for the year was $6,000 or $120 per acre.

Sylvester Tinker, who is an Osage Indian, owns and operates his own farm located approximately 1 mile west of Pawhuska, Okla. He has followed his soil and moisture conservation plan very closely. His friends told him that the farm

which he bought a few years ago would be suitable for frog production; in fact, it was poorly drained. That a drainage system, lime, phosphate, and a suitable crop rotation is paying off and Tinker has no doubt now. Following the drainage, lime, and phosphate the land was seeded to alfalfa which he left for 4 years. Early in 1951, the alfalfa was plowed up and the field planted to corn, following SMC's recommendation on fertilizer.

Tinker reported in 1951 that the field averaged 70 bushels of corn per acre. The corn sold for $1.50 per bushel, making a gross income of $105 per acre. "Adding the income from the 4 years of alfalfa to the 1951 corn crop," Tinker said, "I've been well repaid for the expense involved to date, and I want to knock the rough spots out of my drainage problem before I go back to alfalfa."

Tinker and the other 409 operators on Indian land are cooperators with the Osage County Soil Conservation District. The Osage Agency was most instrumental in the establishment of the district and the history of the soil-conservation work units of the two organizations shows their work has been effectively coordinated on a cooperative basis.

MUSKOGEE AREA

Five Civilized Tribes (Okla.)

The following story appeared in the Oklahoma PMA Informer of July 20, 1952, and in the August 20, 1952, issue of the National PMA News:

"GIVE IT BACK TO THE INDIANS, THAT IS—MORE LIKE JACK WOLF

"By D. C. Scott, CAO

"A recent visit to the farm of Jack Wolf, Seminole Indian, of route 3, Seminole, Okla., where we observed the active soil-building program being carried out on what was a wornout farm, just about convinced us that what we actually need to do is to give a lot of Seminole County back to the Indians—like Jack Wolf.

"Jack bought 40 acres of badly depleted land in 1948 and began his conservation and rebuilding program in 1949 by terracing one 12-acre field and planting 12 acres of hairy vetch, to which was applied the needed amount of superphosphate. He also sodded 7.5 acres of Bermudagrass for pasture, and limed 5 acres of pasture that year. In 1950 he applied 15 more tons of lime to his pasture and planted 11 more acres of hairy vetch, having harvested most of the seed from his previous year's vetch crop.

"Superphosphate was applied to the new field of vetch. The 12 acres seeded in 1949 was left for a volunteer crop in 1950 and 1951.

"Realizing that 40 acres of land was not enough to carry out the livestock program he had in mind, Jack bought an additional 80 acres that joined his original tract in 1951 and began immediately to build a good pasture on it. Having already seen the benefits of hairy vetch as a soil builder he planted another 10 acres on a badly rundown meadow and plans to sod it to Bermuda after running it in vetch for a couple of years. Having seen the response from the proper use of phosphate, he not only applied phosphate to the 10 acres of vetch but also to 34 acres of Bermudagrass which he sodded on abandoned cropland. The grass was sodded with his own equipment and a homemade sodder leased from the Indian association.

"Phosphate was applied in the drill with the Bermuda, and Korean lespedeza was seeded broadcast on the entire 34-acre field. 'The results of this application of phosphate has demonstrated to me how I can increase my lespedeza pasture carrying capacity fourfold,' Jack states, as he called our attention to the excellent growth of lespedeza in the drill as compared to the poor growth between the rows that was not phosphated. 'One of my first jobs next spring,' Jack said, 'will be to broadcast phosphate on the entire field and disk it into the soil before the lespedeza comes up.'

"During the current year about 12 acres of Sericea has been seeded on a bottom field that has been drained by 2 ditches constructed by Jack with his own tools.

"Restoring the fertility to many acres of badly depleted cropland has been the major problem on this Seminole County farm; and Jack Wolf, young Indian farmer, in cooperation with the Indian Conservation Unit and the PMA county committee, is well on his way to establishing a profitable farming enterprise on what was 120 acres of very poor soil."

In 1952 more than 20,000 soil samples were tested for Indian lands in 37 of the 40 counties of the Five Civilized Tribes Reservation.

Charley Catcher planted 4 acres to permanent pasture with a mixture of fescue, hop clover, and vetch at rates of 6, 2, and 15 pounds per acre, respectively. In the past year he obtained 405 pounds of fescue and big hop clover seed plus 70 bales of hay. This was in addition to grazing for 2 cows and 2 horses during the winter and spring. He retained 100 pounds of big hop clover seed for fall planting and sold the balance for $269.

Mr. Walter Holt, of Adair County, has been farming according to a conservation plan since March 1949. Prior to that date this farm was a typical eastern Oklahoma farm totaling 126 acres. Thirty-five acres of this was open land, mostly too steep for row-crop farming, low in fertility, and generally in a poor condition.

After deciding on a farm conservation plan with the help of the Indian SMC, Mr. Holt first constructed 2.2 miles of terraces to control severe erosion and started on a fertility-building program by the use of recommended fertilizer, vetch, and permanent pasture rotation. He also constructed two stock-watering ponds to further his livestock program.

During the 3 years 1949, 1950, and 1951, Mr. Holt improved his land by using vetch in rotation with corn, increased his livestock holdings, and in general rebuilt his entire farming program to put it on a paying basis, and made money each of these years on his farming operation.

Beginning January 1, 1952, Mr. Holt's inventory totaled $7,194, as follows:

Inventory, Dec. 29, 1952:			
Livestock (2 horses, 54 cattle)	$7, 100. 00		
Other (crops, hay and corn)	954. 00		
Total inventory		$8, 054. 00	
Receipts for 1952:			
Crops (hay, strawberries, tomatoes, etc.)	$3, 282. 00		
Livestock (17 head cattle)	1, 151. 85		
Total receipts, 1952		4, 433. 85	
Closing inventory plus receipts			$12, 487, 85
Inventory, Jan. 1, 1952:			
Livestock (2 horses, 23 pigs,[1] 39 cattle)	$6, 450. 00		
Other (crops, hay and corn)	744. 00		
Total inventory, Jan. 1, 1952		$7, 194. 00	
Expense for 1952:			
Labor	$1, 572. 65		
Fertilizer	107. 90		
Livestock (feed and minerals)	200. 05		
Seed	81. 32		
Custom harvesting	316. 72		
Custom hauling and plowing	128. 83		
Total expenses		2, 407. 47	
Opening inventory plus expenses			9, 601. 47
Real profit for 1952 (closing inventory plus receipts minus opening inventory plus expense)			2, 886. 38

[1] Entire pig crop lost from cholera.

Mr. Holt is completely sold on his conservation plan of farming, and his plans for 1953 include planting 5 acres of Bermuda, overseeding 9 acres of lespedeza and ladino with Kentucky 31 fescue, and the construction of another stock-water pond in order that his pastures may be rotated more efficiently.

In the fall of 1951 Harris Storey, a Choctaw Indian living in McCurtain County, requested assistance from soil and moisture conservation personnel in working out a conservation program on his farm consisting of 140 acres of upland and 40 acres of Red River bottom land. Although the plan was written very late in 1951, 10 acres of botton land were seeded to alfalfa after soil analyses and the application of 300 pounds of superphosphate and 100 pounds of potash per acre.

In the spring of 1952 Mr. Storey applied 200 pounds per acre of 12-12-12 fertilizer to 60 acres he was planting to a recommended hybrid corn. When about

knee-high at the second cultivation, he side-dressed the corn with 100 pounds of ammonium nitrate per acre. He obtained a yield of 70 bushels per acre where he had made only 20 bushels before.

The native grass and Bermuda were seeded to Korean lespedeza, and open range was utilized as much as possible. Approximately 75 head of cattle were carried during 1951 and 1952. Thirty acres of cornland was seeded to vetch in the fall of 1952 and is being used for winter pasture.

Following is a summary of farm operations during 1951 before any conservation practices were carried out, and 1952, which is the first year after conservation and improved practices were started:

INCOME, 1951		INCOME, 1952	
Corn: 1200 bushels, at $1.50	$1, 800	Corn: 4,200 bushels, at $1.50	$6, 300
Calf crop: 30 calves, at $50	1, 500	35 calves, at $50	1, 750
Hay	------	Hay: 1,000 bales, at $1.50	1, 500
1951 income, total	3, 300	1952 income, total	9, 550
EXPENSES, 1951		**EXPENSES, 1952**	
Hay: 30 tons, at $30	900	Hay	------
Cottonseed cake: 10,000 pounds, at $5 per hundredweight	500	Cottonseed cake: 500 pounds, at $5 per hundredweight	25
Fertilizer and corn seed	150	Fertilizer and corn seed	840
Alfalfa seed and fertilizer	------	Alfalfa seed and fertilizer	300
Vetch and lespedeza	------	Vetch and lespedeza	200
Hay and cake yet to be purchased	------	Hay and cake yet to be purchased	1, 500
Total expense, 1951	1, 550	Total expense, 1952	2, 865
Net income, 1951	1, 750	Net income, 1952	6, 685

MINNEAPOLIS AREA

Cherokee Agency (N. C.)

In less than a decade a transformation has taken place in the hill country of western North Carolina. The mental outlook and the physical health of the Cherokees have improved greatly. Their agricultural resources are being treated and managed according to the most up-to-date scientific knowledge. The key to the change is cooperation on the part of the agency staff and the Indian leaders actively supported by the Indian people in terms of community development translated into individual effort for the family and the group. The effort has been well organized and is operating successfully. Prizes are awarded to individual families and to communities in open competition within and without the reservation. Some of the tangible results are:

1. Practically every acre of crop land is utilized.
2. 48 percent of the cropland is in improved pasture.
3. Number of farmers participating in farm pasture program increased from 98 in 1948 to 169 in 1950 and 215 in 1952.
4. Commercial fertilizer on pastures has increased from 0 pounds in 1948 to 154,000 in 1950 and 253,000 in 1952.
5. Practically all families use some commercial fertilizer, which has increased from 99,000 pounds in 1946 to 475,000 in 1950 and 633,000 in 1952.
6. Winter cover crops of crimson clover, Austrian winter peas, and vetch now are grown on 50 percent of row-cropped land.
7. In 1952, 20 new homes were built and 129 repaired, compared to none in 1948.
8. Homes with electricity numbered 118 in 1948 compared to 359 in 1952.

BILLINGS AREA

Blackfeet (Mont.)

Mr. A. E. Leech has been a lessee on the Blackfeet Reservation for the past 20 years. In the last 5 years, he has begun conservation farming that will benefit the soil, the Indian landowner, and himself.

In the spring of 1947, complying with conservation stipulations that were made a part of his lease that year, he seeded 380 acres of sweetclover with wheat on his

irrigated land. The clover served as a cover crop, and 300 acres were green-manured in 1948. Eighty acres of the clover were left to mature and a seed crop was harvested. The seed was used for seeding more clover the following year, and he had seed to sell from the 260 pound per acre yield. All of the land that was seeded to clover in 1947 yielded 35 bushels of wheat per acre in 1949, while the land not having clover averaged 24 bushels per acre.

Partial plans, based on soil surveys, replaced the stipulations in 1950. In that year, Mr. Leech installed six irrigation drops to be used as erosion-control structures in his field irrigation system. These were the first drops installed on trust land by the land user. In the same season, working with SMC technicians, he planned a rotation whereby all his land would be green manured once every third year. He began the practice of using treble-superphosphate on the clover-barley seeding and 10–20–0 fertilizer on the grain seeding. Results of the planned rotation with fertilizer application have been consistently higher yields than the average for the irrigation project, and his yields are increasing yearly. The use of phosphate has hastened maturity as well as increasing barley yields, so that harvesting operations can begin earlier. This spreads the workload and resulted in more frost-free grain in 1950 and 1951, when the Blackfeet Reservation was plagued with frost.

According to the conservation plan, Mr. Leech agreed to seed 80 acres of brome-alfalfa mixture on his irrigated land. This was seeded in 1952 with half the normal seeding of barley. Sixty pounds per acre of 10–20–0 was applied to this seeding. He now plans to seed 40 acres more of irrigated hay-and-pasture mixture in 1953. This and the 80 acres already seeded will supply hay and some pasture for the moderately sized herd of Hereford cattle he has bought to round out his diversified farming program. By developing and following a conservation farm plan he has increased greatly his agricultural security and is increasing his production for the national welfare.

Crow (Mont.)

Kenneth LaFever, a young Indian, returned home from the Armed Forces 5 years ago and began farming operations on his father's allotment in the Thompson Creek area, southwest of Busby, Mont. He had little capital to invest, but had a driving desire to obtain a living from the land.

Dry farming in this area is a very risky enterprise, since the land receives an average of only 12½ inches of precipitation per year. From this venture, he found that crop returns did not provide a dependable income. In the summer of 1951, this young man asked the SMC Unit at Crow Agency for assistance in formulating a remedy which would not only increase crop production, but also supply a more reliable income.

A survey was accomplished and it revealed there were 52 acres of land suitable for irrigation with little or no land leveling required. Also, it was evident that Thompson Creek provided an adequate water supply. This runoff heretofore went down the creek, unused, during the late winter and early spring months. The survey showed that an old stockwater pond dam could be enlarged (by moving approximately 9,000 cubic yards of earth) to impound approximately 135 acre-feet of water. Of this, 93 acre-feet could be impounded above the proposed head ditch level, to be withdrawn through a headgate by gravity flow as needed. The remainder of the impounded water could be utilized by pumping into the ditch, at little additional cost, in the event it was needed.

Mr. LaFever was unable to finance the construction of this fill with his limited capital, and was advised to sign up with PMA for benefit payments under the agricultural conservation program the following year. SMC meanwhile began drawing up the designs for approval by the State PMA office, and as soon as these approvals were granted, construction began.

SMC technicians staked out the fill, designed the spillway, and planned the necessary ditches. They supervised the construction and installing of the headgate and pipe. The spillway was designed to flood-irrigate an additional 12 acres of an alfalfa field, above and to the side of the area under ditch, whenever the runoff water exceeded the storage space. This flood irrigation occurs only during the spring runoff, but should increase the production of alfalfa by at least 40 percent.

With the completion of this structure, the LaFever family now have a tract of land which will insure a dependable and increased income in future years. With the help of Production and Marketing Administration benefit payments, this enterprising Indian was afforded a method of overcoming the lack of precipitation

by impounding water that would otherwise be wasted during the season when it cannot be utilized. Plans are already progressing rapidly to install a structure of this type, to be included in next year's program, on a neighboring Indian's inherited land, located on Davis Creek, just north of Mr. LaFever's farming unit. This neighbor has acquired the knowledge of surmounting one climatic factor by his friend's experience and determination.

Fort Belknap (Mont.)

The Joe Demontiney farm of 331 acres in the summer of 1950 had 66 acres of cultivated land, 23 acres of brushland and the balance as grazing and pasturelands. Joe began his conservation operations that summer by seeding 10 acres of idle land to a hay mixture of timothy, bromegrass, and created wheat grass. Also 3 acres of brushland were cleared and seeded to timothy. In 1951, 10 acres were cleared and 6 acres were leveled with SMC equipment. The latter was seeded to oats and produced 1½ tons of hay per acre. In 1952 using SMC equipment an additional 4 acres were cleared. Of the land previously cleared, 5 acres were seeded to alfalfa with oats as a nurse crop. A small diversion dam and headgate were installed to make water available from a stream. Sixteen hundred feet of ditch brought 10 acres under limited irrigation. The main purpose of the ditch was to get water on a new stand of alfalfa and on 7 acres of oats for hay. These crops would have failed if water had not been provided. Hay production in 1952 tripled that of 1951 and was 6 times that of 1950. In fact, 1952 was the first year that Mr. Demontiney has not had to purchase hay for his cattle.

Soil conservation has made a good start on this farm; but it is just beginning. Present production is hay, native grasses and oat hay. Potential use is also for hay, but combined with a number of practices will materially increase production on and value of the farm and at the same time more effectively control erosion.

Fort Peck (Mont.)

At the Fort Peck Agency, as at numerous other agencies, soil surveys are being utilized in increasing amounts as the basis for making land appraisals for lease or disposition by sale, exchange, etc. The first year of operations by this method at Fort Peck was 1952. Land values have risen 100 percent. Farm leases which averaged $90 for 110 acres are now $216. Part of the differential in farm rentals is the result of farm inventories and correcting the acreage for cultivation to that being utilized.

Joe Day leases his farmland under provisions that provide for its improvement, so that when he himself takes up farming he will have a well-developed acreage. The land lays just off the Oswego-Frazier irrigation project. One of the things that Mr. Day has done under the provisions of the lease he grants is to have the land partially leveled and diked in such a manner that the waste water of the irrigation project can be utilized. This work was performed in 1950 and by the quarter-crop-share provision of the lease Joe Day's share has jumped from an average of $5 in former years to $15 per acre for both 1951 and 1952.

Wind River (Wyo.)

Mr. Don Rice, an ex-policeman of a California town, moved onto the Wind River Reservation in 1951 without a great deal of farming experience. He bought a deeded tract and took over the leases on 260 acres of Indian-allotted land, of which 151 acres were classified as irrigable. The previous operator of these tracts of deeded and Indian land had not been successful. When Mr. Rice took over only 32 acres of the raw sagebrush land had been put in cultivation. He realized that in order to pay taxes, rent, interest, and water charges he needed help and went to the soil-conservation work unit for technical advice and assistance in developing a soil-conservation plan inclusive of rotations and the design and layout of the interior irrigation system.

The credit for the success of the operations goes to Mr. Rice for his approach to his problems and his untiring efforts to farm Indian lands along sound conservation lines. By his efforts in 1951 he placed an additional 37 acres of Indian land in crop and did considerable subjugation work on the remaining irrigable lands. In 1952 he had 64 acres of excellent alfalfa, 6 acres of tall wheatgrass and 57 acres of wheat and barley. The land had been rough leveled, a contour system of field laterals installed, and 18 drops constructed. The drops were placed in a field head ditch and served to reduce erosion and provide lateral turnouts. As a result, he obtained excellent water distribution and a fine yield of alfalfa. Additional rough leveling, field laterals and drops are on the 1953 schedule. But Mr. Rice has a good operating farm almost completed.

ALBUQUERQUE AREA

Southern Ute (Colo.)

Soil-conservation work on the Southern Ute Reservation was started in 1951 with the appointment of one technician. The staff was expanded in 1952 to form a balanced work unit. Tangible evidences of progress are being made. The tribal council and the agency personnel have laid the basis for integrating the Southern Ute farmers and ranchers into the agricultural communities of La Plata and Archuleta Counties. Meetings have been held; cooperation has been started; and the soil-conservation work unit has been established in Durango, Colo., in the same building where the Farmers' Home Administration and the Production Marketing Administration have offices. The problem of weed and willow infestations has been tackled. The tribal council has set up a program for their control, has purchased a 200-gallon self-powered sprayer, and has had a demonstration by Mr. Bruce Barton, weed expert of the Colorado Agricultural, Industrial, and Mechanical College. In the first season 27 Indian farmers killed willows along irrigation ditches and encroaching on fields on 35 percent of the area to be treated. The tribal council has investigated the possibilities and have agreed on an active program which will step up alfalfa yields from an average of 1½ tons per acre to at least 3 tons. As a part of the alfalfa program the tribal council has purchased from tribal funds a carload of 40 tons of treble superphosphate for use by 65 Indian farmers along the Pine River. Some will be used on each farm and the results used in furthering the program.

United Pueblos (N. Mex.)

The public has been well informed for many years that the Pueblo Indians are farmers and that agriculture is most important in their economy. But their difficulties in farming generally have not been realized and their lack of advance in agriculture has not been appreciated. Problems include minimum of water for irrigation, other than the best use of water, small size of farms and fields, excessive irrigation distribution system for acreage involved, the breakdown in soil structure, lack of crop rotation, and nonuse of commercial fertilizer. The Pueblos with SMC guidance are improving their agricultural activities by action to control overhead waters with their burden of silt, improved irrigation distribution systems, institution of crop rotations with green manures, use of commercial fertilizers, incorporation of soil amendments, and other soil-conservation benefits for better agriculture. Prior to 1950 green-manure crops were not used. Since 1950 green-manure crops such as yellow blossom sweetclover have been used on 216 acres of fields 1 to 10 acres in size. Progress in conservation farming is shown by the following figures:

	Prior to 1950	Years 1950–52
Acres leveled	147	687
New cooperators	21	52
Acreage under farm plans	402	1,462

The following table shows average yields of major crops and how these were increased in 1952 for individual Pueblo farmers who used commercial nitrogen and phosphate fertilizers:

Year	Alfalfa, tons per acre	Oats, bushels per acre	Wheat, bushels per acre	Corn, bushels per acre
1948	2.15	31.5	21.8	15.4
1949	2.64	26.2	21.4	17.7
1950	2.17	30.5	20.2	18.4
1951	2.75	26.4	18.3	19.7
1952	5-6	52.2	43.5	50–60

THE SOUTHWEST (ARIZONA AND NEW MEXICO)

Deep charco pit-type reservoirs

In answer to the need to control erosion and to provide stock-water facilities in time of drought the soil and moisture conservation technicians of the Bureau designed the deep charco pit-type reservoir. The first of these reservoirs were

constructed in 1949 on an experimental basis and proved so satisfactory that their construction in the Southwest was started in earnest in the summer of 1951. Now there are approximately 200 with over 100 constructed on the Navaho and Hopi Reservations in the period from July 1, 1951, to October 1952. This year their installation is being extended to the plains region.

Depending on size, from one filling they provide stock water for a period of 2 to 3 years. They are deep holes constructed by bulldozers with sloping sides and surrounded by dikes formed by the material excavated to decrease loss of water by penetration and evaporation as well as to decrease wave action. Water is led through the dike by a small pipe and dropped by chute or vertical fall to the bottom of the reservoir. Water entering the structure is nearly silt-free. For instance, it took 168 hours to fill through an 8-inch pipe the 14,917,800-gallon structure at Billy Blackhorse's in the Kayenta portion of the Navaho Reservation. With a minimum of maintenance and lack of silt in the water the structures will last indefinitely. There is no bogging down of stock. For instance, on the Papago Reservation in the drought summer of 1950 only two surface-water installations were functioning. One, an older type charco, finally went dry after 18 head of cattle had died in the silted bottom. The other was the first deep charco pit-type reservoir constructed the summer before, which came through the summer of 1950 with 19 feet of unused water.

Erosion is controlled in several ways. By training dikes and a desilting basin above the structure, much of the suspended sediment load is dropped. Below the structure there may be additional water-spreading installations. All of these prevent gully erosion and produce additional forage to trap more silt. Although the reservoirs only store a small portion of the runoff, flood crests are depressed and controlled to decrease damaging erosion. Possibilities of erosion are materially decreased by reason of the fact that spillways are "daylighted"; that is to say, not perched above the valley floor. Furthermore, the spillways are made to be as wide as possible.

PHOENIX AREA

Colorado River (Ariz.)

At the Colorado River Agency, following the subjugation and assignment of the land, soil and moisture conservation technicians have entered into farm planning with the Indian colonists. In the past 2 years over 100 plans have been made and placed in operation. The Indian farmers have responded with a high degree of compliance. An analysis shows that, although the farm plans have been in operation only a short period of time, their operators are receiving 43 percent more per acre in terms of dollars and cents than those who are operating without the benefit of a farm plan.

The Colorado River Farm Week, April 7–12, 1952, sponsored by SMC and cooperated in by many agencies, implement dealers, and fertilizer companies proved a fine success. Twenty major companies participated. There were 2 locations with 2 days at each location. The first day was for field demonstration and the second for servicing, maintenance, and adjustment of equipment. A total of 600 farmers from the reservation and nearby farming communities were in attendance. The farmers and dealers in equipment and supplies were uniformly of the opinion that the affair was so beneficial that it should be repeated in future years. The Farm Week had a definite impact on the Indian farmers in increasing their interest in and practice of improved farming techniques.

Fort Apache (Ariz.)

Juniper eradication continued during 1952 on an accelerated basis with the White Mountain Apache Tribe and the various Indian livestock associations making $65,336 available. The total acreage treated to date in the eradication program is 34,647. The largest acreage for a single year by far is 1952 with 11,025 acres. It is estimated that 20 percent of the juniper-eradication program on the Fort Apache Reservation has been completed. Hand labor and machines are both used. The agency has determined that for eradication of the alligator juniper, which has the ability of sprouting from the root crown, working tractors fitted with scoops and utilizing hand labor for the small and largest trees is the most practical method. Grass is making advances on areas treated in past years. The area treated at Grasshopper 3 years ago had a beautiful stand of grass in 1952.

Good livestock management is necessary for the recovery of grass on areas from which juniper has been eradicated. The Apache livestock men are realizing this more and more and are becoming willing to practice management. The Indians of the Cedar Creek district have developed and placed in effect a program for the rehabilitation of their ranges. The program includes, in addition to juniper eradi-

cation on a stepped-up basis, such features as the complete exclusion of all stock from the most critical winter-range areas for 2 years, seasonal adjustment of grazing pressures, elimination of all horses above an absolute minimum, elimination of all nonproductive cattle, range reseeding, installation of mechanical structures, and the study of underground water supplies for irrigation of agricultural lands. The enlightened understanding and determination of people locally expressed in following through on such programs will bring a bright new day for the ranges of the Southwest.

Uintah and Ouray (Utah)

It has often been said that "Experience is the best teacher." SMC tries many ways to encourage operators to gain the experience. Here is an experience story from the Uintah Basin. An Indian had SMC clear and level 15 acres of land for him. The technicians recommended the planting and plowing under of sweetclover, but he did not wish to do it. Then they advised his fertilizing the land prior to the planting of oats and alfalfa. He was reluctant to do so, but finally agreed to buy a few sacks of fertilizer and see if it would make any difference in production.

The Indian drilled one strip across his field with the fertilizer. The crop on the fertilized strip remained green and grew tall while the rest of the field burned. The fertilized strip took less water even with much greater growth than the unfertilized to mature the crop.

On the portion of the field where oats were grown alone there was a height difference of 12 to 14 inches in favor of the fertilized strip. The oats on the fertilized strip ran from 50 to 60 bushels on an acreage basis, whereas on the unfertilized strip the farmer barely received the return of his seed.

A portion of the field was planted to alfalfa with oats. On the fertilized strip the alfalfa was thick and 12 inches in height. On the unfertilized ground the alfalfa was sparse and only 5 inches high.

This Indian farmer taught himself a valuable lesson in farming. Now he is converted to fertilization.

Mr. Herman Crumbo, during the past 5 years, has been blazing a conservation trail for Indians and non-Indians alike in the Uintah Basin. He is a one-quarter-blood Potowatomi and is married to a one-half-blood Ute. In the spring of 1947 he bought a 20-acre farm of ordinary river bottom land with 9.6 acres of old alfalfa and the balance in brush, weeds, and waste. He immediately initiated a soil-conservation plan of operations and with the assistance of PMA payments cleared, ripped, piled, and burned the brush and roots on the noncropped land. In the spring of 1948 the new land was rough-leveled and deep-plowed, ditches constructed, and the 20 acres put under fence. The 9.6 acres of alfalfa were turned under, planted to spring wheat and again to fall wheat. During 1948, 8 acres of the newly subjugated land were planted to barley. He fallowed the entire farm in the fall of 1949 and the winter of 1949–50. In the spring of 1950 the entire farm was releveled and additional ditches were made to facilitate good irrigation practices.

Mr. Crumbo, being of a progressive nature and by diligent work, changed his land into a highly productive state. His land is properly leveled and is in an ideal condition for irrigation and cropping. Through a good fertilizing program he has increased his crop yields to the extent that his farm is self-supporting. Today he has one of the best producing farms in the Uintah Basin.

His summary of expenses and income reveal the change in the farm.

Summary of expenses and income, 1947–51

Year	Improvement and subjugation costs	Farm expenses	Total cost	Crop income	PMA income	Gross farm income	Net farm income
1947	$602.50	$145	$747	$60	$180.00	$240	−$507
1948	506.00	311	817	585		585	−232
1949		690	690	1,115		1,115	425
1950	338.90	800	1,138	1,248	311.67	1,560	422
1951	100.00	675	775	3,527		3,527	2,752
Total	1,546.50	2,621	4,167	6,535	491.67	7,027	2,860

The year 1952 proved to be a poor year for the production of alfalfa seed, but Mr. Crumbo came through with a good crop. He sprayed his alfalfa twice to

control insects at a cost of $90. By exchanging work with his neighbors in advance, he was in a position to have plenty of help to harvest his crops. It cost him 10 tons of the first cutting of alfalfa to get his hay harvested. The cost of harvesting the alfalfa seed was $200. Irrigation, operation, and maintenance charges amounted to $35. As a result he had 10 tons of alfalfa hay and 5,960 pounds of Ranger alfalfa seed to sell, valued at $3,976.

The year 1952 permitted the Crumbos to make additional changes. They constructed on the farm with the partial aid of a $6,060 loan from the Ute Tribe a completely modern four-room home with bath and garage. They drilled a domestic well and installed an electric pump to furnish water pressure for the house. In the fall of 1952 they obtained the assignment of a 38-acre tract adjoining their farm. At a cost of $337 Mr. Crumbo had a contractor remove the heavy brush and trees from 5 acres and clear out lanes for fencing. The Crumbos are in shape to continue and to expand their progressive farming operations and to enjoy the fruits of their labor. They are convinced the conservation way is the best way of farming.

WINDOW ROCK AREA

Navajo and Hopi (Ariz., N. Mex., and Utah)

The veterans' training program on the Navaho and Hopi Reservations is proving of valuable assistance to the soil-conservation program. The trainees performed much good work during their training period. In 1952 they began completing their training and many have taken permanent positions with the Bureau's Branch of Soil Conservation. Messrs. George Willie and Waldo Emerson have qualified themselves as grade GS–5 agricultural engineers (conservation). Four others have become engineering aides. The training produced 11 heavy-equipment operators and 2 heavy-equipment mechanics, all of whom are working either for the Government or private contractors. These men are now performing valuable services in planning and executing soil-conservation work. The aides in particular are freeing more highly trained technical men to engage more of their time in more difficult problems. These trained Indians are particularly effective in furthering soil conservation among their own Indian people or those of the neighboring tribe.

Navajo (Ariz.)

Just south of Monument Valley in northern Arizona is the Denehotso community of Navaho Indians. It is a remote and isolated area surrounded by bare solid rock, sand dunes, and scanty vegetation. There is some irrigable land in the valley through which Laguna Creek flows on its way to the wild Chinle Wash which thereafter soon empties into the San Juan near Mexican Hat, Utah. Although irrigation was developed some years ago, life for the Denehotso Indians continued to be a severe struggle with the forces of nature. They had very few agricultural advantages; for instance, only a very few years ago they cut their alfalfa with discarded broken automobile springs sharpened on one side and bound on one end to a short straight stick. The hay was baled by foot tamping in small wooden boxes holding about 30 pounds, and the bales were tied by hand with yucca leaves. Fortunately, these operations have been modernized through the use of machine equipment.

Yields from the fields remained low by reason of damage suffered from floodwater carrying silt descending on the area from the surrounding bare rock and dunes. The Indians and SMC planned and developed a system of dikes to divert these waters around the farming land. Yields doubled and tripled and thereby created the desire for still greater yields. Control of wind erosion was the answer to the problem, and the Navahos began requesting assistance in the applicable agronomic practices such as fertilization, deep plowing, cover and manure crops, and grass seeding. Sixteen agreements were entered into covering 168 acres of irrigated cropland. Comparison of accomplishments for 1950 and 1952 shows the following:

	1950	1952
Deep plowing (acres)	2	187
Fertilizing	0	20
Cover crops and green manure (acres)	7	48
Crop residues	106	203
Grass seeding	0	15

Navajo (N. Mex.)

The taming of the Tocito Wash is a story of what can be accomplished by local people and the Government working together to control active erosion and how such joint action improves the economic opportunity of the people directly concerned. The problem of the Tocito drainage is typical of that of many areas, and the value of its solution is in what can be accomplished in the way of corrective measures. With the work begun late in 1951 and completed in April 1952, at the present time we can tell you of only the first year's story of after treatment, but the story of the before treatment is ready for recording.

One traveling United States Highway No. 666 in northwest New Mexico on the Navajo Reservation crosses the Tocito Wash on a bridge 73 miles north of Gallup and 25 miles south of Shiprock. The drainage heads on the east slope of the Chuska Mountains 18 miles to the west of the bridge and continues 8 miles to the east where it empties into the Chaco Wash, a tributary of the San Juan River. The Tocito Wash is an intermittent stream. The whole drainage in times past has been overgrazed. The runoff from the heavy rainfall in the mountains tends to literally shoot down the mountain slopes and across the relatively flat land below. On the lower flatlands with highly erosive soils huge gullies are gouged across the landscape. The gully system on the Tocito Wash is particularly bad, with the main channel averaging 38 to 44 feet in depth. The gully trenched deeper and widened with every runoff, increasing the sediment the San Juan carries to the Colorado River for dumping into Lake Mead. The highway bridge had been replaced once and was approaching the place where replacement would be necessary again.

The Tocito Wash has been recognized as a problem for many years by both the Navajos and the Government alike. But it remained for the two to develop a common mind to control the problem before an effective solution could be developed and placed in operation. Eight Navajo stockmen in the Tocito community determined that the silt-laden waters were needed to increase forage and decrease erosion. Headed by Messrs. John Andy and Rex Begay, they asked the soil conservation work unit at Shiprock, N. Mex., for technical and other assistance. The Indians realized a knowledge of soils and engineering were needed in addition to heavy equipment for the construction of dams and dikes.

SMC technicians made extensive surveys throughout the 57-square-mile watershed. Several points became apparent:

1. The flatland part of the watershed (roughly two-thirds) contributed very little to the overall runoff.
2. Water from the mountain must travel at least 10 miles to reach the spreading area.
3. United States Highway 666 is located in such a way as to interfere with the diversion dam.
4. Runoff was heavily laden with silt.

The technicians also determined:

1. Annual rainfall averages 16 inches in the mountain and 8 inches on the lower levels.
2. The wash, on a 19-year frequency, is estimated to have a peak discharge of 3,700 cubic feet per second.
3. The high discharge usually comes from summer rains and is of short duration lasting not more than 4 hours.
4. Peak runs contain as much as 22 percent sediment.

The plan developed and executed provided for a main diversion dam; a water-spreading area of approximately 2,400 acres with training dikes; 2 deep charco pit-type reservoirs; and 1 detention dam. The main diversion dam containing 31,000 cubic yards was placed one-quarter mile below the highway bridge and a rather deep spillway was cut to guide all of the water southward from the wash. All the water enters a natural depression or old shallow lakebed covering about 100 acres. This is especially desirable, because all sediment is trapped in the lake, thereby permitting only clean water to spread onto the land. Various spreader dikes guide the water from the old lake through some 3 miles of rangeland. Near the old lake is a deep charco pit-type reservoir 20 feet deep that stores 2,529,000 gallons of clear water for stock-water purposes. Adjacent to it is a fenced woodlot planted by the Navajos for future use for posts and fuel. Near the lower end of the spreading area is another one of these reservoirs 28 feet deep for the storage of 4,268,000 gallons of water. At the lower end of the spreading area is a detention dam of 14,000 cubic yards with a capacity of 14 acre-feet. This structure is particularly important for by its natural rock spill-

way it prevents the spreading area from unraveling or eroding and returns any surplus water to the Tocito Wash.

A total of 140,000 cubic yards of earth was moved in the construction of which 55,000 was in training dikes and 85,000 in dams and reservoirs. Navajo Indian contractors moved all of the dirt at a cost to the Government of $13,200 or a cost of 10.8 cents per cubic yard.

The 8 local Navajo stockmen and their Indian friends performed an estimated $13,200 of work. These 20 Indians worked tirelessly to perform all headwork consisting of fence construction, laying of rock, laying pipes, planting trees, etc. All of this work was performed without pay. The enormous amount of gratuitous work they performed in a neighborly fashion caused the project to be completed and ready for the 1952 summer rainy season.

In the first season, 450 acres of excellent grass was produced on the spreading area. Following the flooding from the first rain the valley began turning green. Sacaton and drop seed grasses began recovery immediately. Soon thereafter galletagrass from seed in the ground began to appear throughout the area where water had spread. The peak flow occurred in August and amounted to 2,400 cubic feet per second. The run was absorbed entirely on the spreading area. The channel gradient has become flatter for 7,000 feet above the diversion. Concrete piers on the highway bridge that had been exposed for 9 feet have been covered by silt. The tree plantation started nicely. Cultivation was started for corn. An immediate influx of wild fowl was noted. The highway bridge has been secured. The gullying is under control. Bank cutting downstream is halted. The land has been estimated conservatively to be eight times more valuable.

The eight Navajo families who contributed so much to make the project a success are now reaping benefits from their labors. They will have much more forage and water for their stock and will be able to farm with assurance of harvesting a crop. They intend to control the number of their livestock consistent with the forage produced. They have disposed of their own excess stock of horses and are prepared to deal with trespassing horses. As the result of planning, work, and the application of the proper combination of soil-conservation practices, these people are materially increasing their standard of living. At the same time, erosion on one drainage is being controlled. In the future, we anticipate furnishing you additional chapters of this story.

SACRAMENTO AREA (CALIFORNIA)

On the Jouise and John Aguilar farm on the Morongo Reservation by the application of phosphate fertilizers and installing a sprinkler system of irrigation, the 5 inches of available water in 1 year increased returns per acre from an average of less than $50 to an income of $150.

PORTLAND AREA

Warm Springs (Oreg.)

The Warm Springs Tribal Council in aiding the Indian people to obtain a higher standard of living has alined itself solidly behind soil conservation. The council has established the tribal soil conservation enterprise and for the past fiscal year made $79,000 available. A portion of the money is used to finance farmers in installing conservation practices on a loan basis. The enterprise equipment is scheduled to perform necessary work as needed at predetermined rates.

The Andrew David Farm is an example of the enterprise in action. Mr. David's farm is located at the confluence of Dry Creek and the Deschutes River and contains 29 acres of farmland. In the past, Andrew has practiced dry farming with the result that he obtained 1 crop about every 5 years. He made application for assistance from the enterprise with the result that a soil-conservation plan was developed and has been placed in operation for irrigating the farm by pumping from the Deschutes River. The enterprise furnished all equipment, labor, and material to clear and level the land, install a concrete pipeline to the high point of the land and to install proper distribution system for the controlled use of the water. Costs amounted to nearly $110 per acre which were financed for repayment over a period of years. Following the installation of the system, Andrew planted the whole area to grain except a portion used for a fine vegetable garden in 1952. Foating will be performed to correct settling. Then the area will be put to alfalfa and grass. The potential yield is 150 tons of hay per year.

The Warm Springs Reservation in Washington has only 5,600 acres of farming land within a total area of 563,000 acres. The Warm Springs Indians are isolated to a considerable degree from white agricultural operations. In the short 2 years

that there has been a soil-conservation unit at the Warm Springs Agency the Indians have embraced the program and made real progress in conservation and their own rehabilitation.

During the past year, which was the second year of the program, to assist the Indians in an understanding of placing sagebrush land under cultivation and a cropping schedule, a demonstration was held. Straight plowing was compared to plowing following roto beating of the sage. Work of the Graham-Hoeme plow was included in the demonstration. As a result, James Palmer, an Indian farmer, purchased one of these improved plows. He states that where he used the Graham-Hoeme the grain was much taller and gave a greater yield than did the balance of his farm disked in the usual manner. Through his own experience Jim has seen how rough, trashy cultivation on dry farmland is worthwhile. Also, he is going to use the plow on his irrigated land to cut down on the amount of irrigation water needed. With Mr. Palmer's lead it is anticipated that in the near future other Indians will practice trashy tillage.

Umatilla (Oreg.)

On the Umatilla Reservation in northeastern Oregon, SMC technicians have developed a procedure for substantially increasing wheat yields. These findings are of momentous importance to the expanding population of the Nation and to large areas of the wheat-producing West.

Since the sod was originally broken, wheat has been grown on western dry-land farms on a wheat-fallow basis. By this method, wheat is grown on a field every other year and in the intervening years the land is kept bare. It was supposed the precipitation was not sufficient to produce a yearly crop and that the storage of the water in one season was necessary to produce a crop the second season. The system had the following distinct disadvantages:

1. One-half of the land was out of production each year.
2. The bare land was exposed to wind and water erosion for long periods.
3. Continuous tilling and exposure to freezing, thawing, blowing, and the impact of raindrops broke down soil structure.
4. Continuous stirring and aeration of the soil and exposure to full sunlight caused maximum oxidation and destruction of organic matter with proportionate loss of nitrogen and productivity.
5. Permeability and water-retaining capacity of the soil were greatly reduced.

The net result was a progressively downward drop in yields. Reduced yields would have forced the abandonment of some of this land if the increased use of power machinery had not made it possible for a farmer to greatly increase the acreage he could farm, but even with the use of power machinery many areas were near the point where it was not economical to continue grain farming. Recently, however, the downward yield trend has been arrested or turned upward by the use of cover crops and subsurface trashy tillage. Increased yields, greater permeability, and drastically reduced erosion were very encouraging, but we found that there was still soil loss because of the long periods bare soil was exposed to the elements.

Agricultural research has learned that it was not lack of moisture that forced alternate years of fallow but lack of nitrogen. All the nitrogen released in the soil was immediately consumed in decomposing the heavy grain crop residue and there was none available to start or mature a new grain crop. One year of nonuse was necessary to reduce the added organic material to a point where sufficient nitrogen would be available to produce a crop. Although land in this area is relatively rich in nitrogen and its use was deemed unnecessary, the first farmers who were persuaded 3 years ago to use nitrogen on their wheat got such a tremendous response that in 1952 they used enough to increase the wheat yield of Umatilla County by more than a million bushels. Also, a few farmers were persuaded to follow wheat with wheat plus nitrogen fertilizers instead of clean fallow; the theory being that the added nitrogen would support the new grain crop and naturally released nitrogen would decompose raw roots and straw into effective humus. This system would add organic matter every year and give the soil almost a continuous protective cover. Erosion would stop and the soil would become more productive each year. The theory has been substantiated.

An example of the results of wheat recropping with the addition of nitrogen fertilizer is the dry land on the reservation farmed by Mr. Frank Bowman. Mr. Bowman agreed to put 80 acres into wheat in 1952 which had been cropped to wheat in 1951. For many years the tract had been under a wheat-fallow rotation. The highest yield ever obtained on the field was 38 bushels per acre and the yields had decreased progressively under the wheat-fallow program without fertilization down to a yield of 22 bushels per acre in 1951.

In the fall of 1951 Mr. Bowman incorporated 66 pounds per acre of actual nitrogen into the soil for the benefit of the 1952 wheat crop. Costs were $708 for fertilizer and $50 for application making a total of $758.

The average yield for this field for the 1952 crop was 37 bushels per acre. Mr. Bowman gives credit to the nitrogen fertilizer for an increase of 15 bushels per acre or a total of 1,200 bushels for the field. The wheat was sold for $2.13 per bushel giving a $2,556 return for a $758 investment. The net profit was nearly $1,800 on the increase due to fertilization. In addition, the other benefits discussed above have been derived. In eliminating the fallow year, additional acres of land have been made available for the production of food for the Nation's expanding population.

The Paley report forecasts a population increase for the country from 152 million in 1950 to 190 million in 1975. The population increase creates the problem of providing food for a fifth plate additional on the dinner table. The problem is made more acute by the acreage of agricultural land per person necessarily becoming less. The problem will be solved in various ways. One method which will provide an important portion of the solution will be the elimination of wheat fallow and the use of wheat fertilization for a large portion of the dry-land wheat areas of the West. Recropping with wheat fertilization will increase wheat production by many hundreds of millions of bushels.

Yakima (Wash.)

Mr. Jack Shattuck who operates 360 acres of Indian land at the mouth of Satus Creek could see the productive value of a large part of the land if Satus Creek could be controlled from flooding. Nearly every spring Satus Creek had the habit of going on a rampage. It flooded most of the deep bottomland and along the channel it dug large holes that afterward became sloughs. When it was not digging holes, it was cutting out islands of soil that stood up like piers and which were entirely useless for forage production.

Sometime in the past, the creek cut a new channel approximately one-eighth of a mile north of the old channel. This channel runs parallel to the old one all the way across the Indian lands, approximately 1¼ miles, leaving a 100-acre island of land between the 2 channels. The soil on the island and on either side of the 2 channels is deep and fertile. Mr. Shattuck was farming only 54 acres of the best land on the island and 31 acres south of the old river channel before 1950. His crop yields on these lands under irrigation were very good.

In 1950 Mr. Shattuck with the help of the soil and moisture conservation technicians at the agency worked out a plan to control Satus Creek and bring an additional 135 acres into crop production. The old creek channel to the south was cleared, straightened, and enlarged. Dikes were constructed along the sides of the cleared channel and a large diversion was constructed along the upper end of the Indian land to divert Satus Creek into one channel. Sloughs, cuts, and gullies on 46 acres of undeveloped island land and 34 acres of land south of the cleared channel have been filled and leveled. Sixty-five acres, including the old channel on the north, are still to be cleared and leveled.

Eighty-five acres of Indian land were irrigated before the soil-conservation plans were put into operation in 1950—155 acres are irrigated at present and an additional 65 acres will be added in the near future, making a total of 220 acres of excellent irrigated land. This is an increase of 135 acres of irrigated land conservatively valued at $450 per acre or a total value of $60,750. The value of these lands before development was estimated at $25 per acre or $3,375.

It cost Mr. Shattuck $6,500 to straighten and enlarge the south channel, $6,000 has been spent in leveling 70 acres of land and it is estimated that $5,000 will be needed to complete the leveling job. Mr. Shattuck states that two good crops will pay most of these improvement costs.

The following shows crops produced and the income from the Indian lands before and after the soil-conservation plans were put into operation:

Before conservation plan

Year	Crop	Yield	Value	Total
1949:				
40 acres	Grain	1¼ tons	$55	$2,750
45 acres	Hay	3 tons	25	3,375
Total value of crops				6,125

After conservation plan

Year	Crop	Yield	Value	Total
1950:				
54 acres	Beets	27 tons	$15	$21,870
31 acres	Grain	1¼ tons	55	2,131
Total value of crops				24,001
1951:				
80 acres	Sweet corn	3½ tons	25	7,000
65 acres	Livestock pasture		10	650
Total value of crops				7,650
1952:				
75 acres	Beets	25 tons	15	28,125
6 acres	Corn	100 tons silage	12	7,200
65 acres	Pasture	3 C. M	[1] 50	3,250
9 acres	Leveled, no crop			
	Beet tops grazed			1,118
Total value of crops				39,693

[1] Per acre.

1952 prices were used for all years in making above comparisons.

The value of crops produced increased from $6,125 in 1949 to $39,693 in 1952. Mr. Shattuck states that his sweet-corn crop in 1951 yielded only one-fourth of what it should have done. He got it in late and it just didn't do well. To get the land in full production from the start, Shattuck applied 400 pounds of ammonium sulfate and 172 pounds of triple superphosphate per acre on the land planted to sugar beets. The total cost of the fertilizer was $2,200. The value of the 1952 beet crop is estimated at $28,000. Check covering the first payment on 1952 sugar beets amounted to $19,433. The balance will be paid later.

When the balance of the land has been leveled and the 220 acres worked into a good cropping system, the value of crops produced on this farming unit should total between $30,000 and $35,000 annually. Mr. Shattuck wants his final cropping plan to include: 50 acres of sugar beets, 50 acres of irrigated pasture, 100 acres of hay, and 20 acres of grain or corn.

Northern Idaho (Idaho)

The utilization of crop residue is the most widely adopted conservation practice on the Nez Perce and Coeur d'Alene Reservations. Twelve years ago, when the conservation program was initiated, practically all residue was being burned on Indian land, as well as other lands. Today, all burning on Indian land has been completely stopped and there is much less burning on private land due to the influence of the agency program. When the residue is properly used along with recommended conservation measures, particularly green manure crops, the organic matter which is consumed or lost from the soil in growing cash crops can be replenished.

Winter wheat yields ranging from 40 to 65 bushels or more per acre are being harvested on our lands where soil-building crop rotations, containing clover-grass green manure crops, have been consistently used along with utilization of crop residues. Previous to the beginning of the conservation program, a yield of 30 bushels per acre was considered good on these same lands. The extra heavy grain yields are accompanied by heavy stubble, which requires special management when the land is prepared for fall or spring crops.

The use of heavy stubble requires looking ahead and the proper timing of operations; otherwise, difficult problems may be encountered in handling it. An efficient straw spreader on the combine is essential. Dropping straw in rows or piles increases the problem greatly. It is usually necessary to break the straw into short lengths with a stubble buster or harrow immediately after harvest when the stubble is dry, and incorporate it into the soil with a plow or offset disk. In order to overcome the mechanical difficulties connected with handling heavy residue, the agency conservationists, working with reservation farmers, were instrumental in developing a comparatively simple method of breaking up residue with a harrow. An ordinary steel-lever harrow with the teeth sloped back on an angle of about 30° will do a very good job of breaking up residue when the harrowing is done at the right time and in the right way. The harrow should be

several sections wide to make the operation as economical as possible. It is usually necessary to harrow heavy residue at least twice and it must be double harrowed each time. Going and returning in the same path to complete a round trip is called double harrowing, and is the trick that breaks and pulverizes the residue.

The first harrowing job should be across the field to and fro, back tracking each time on the return trip in the forward path made by the harrow until the entire field is covered. The process is repeated in any additional harrowings, but each job is on a different angle across the field. Regardless of the number of harrowings required, the last one must be made by starting around the field in the opposite direction the land is to be plowed, so the direction of travel on the return phase of each round trip will be in the same direction as the land is to be plowed. This will leave any unbroken straw lying in the same direction as the plowing operation, so it will move through the plows with a minimum of clogging. After the last harrowing, the residue should be incorporated into the surface soil with a plow or worked with an offset disk or otherwise handled depending upon the type of seedbed desired.

Where the nitrogen level of the soil has not been sufficiently increased with clover green manure crops to decompose residue without possible temporary reduction in yields, nitrogen fertilizers may be applied to the residue before it is incorporated with the soil.

Effect of sweetclover green manure on wheat yields, Coeur d'Alene Reservation, Idaho

[3-year moving average]

Period		Yield of—			
		Wheat on sweetclover fallow	Average of all wheat	Wheat on ordinary fallow	Wheat after peas
1945 to 1947	Bushels per acre	35.9	27.6	29.0	25.4
	Percent of average	130	100	105	92
1946 to 1948	Bushels per acre	35.7	25.1	25.4	22.1
	Percent of average	142	100	101	88
1947 to 1949	Bushels per acre	34.5	23.9	23.0	19 9
	Percent of average	144	100	96	83
1948 to 1950	Bushels per acre	35.3	25.7	24.2	20.5
	Percent of average	140	100	96	81
1949 to 1951	Bushels per acre	35.2	26.1	25.9	20.5
	Percent of average	135	100	99	79
1950 to 1952	Bushels per acre	36.8	27.6	28.9	21.6
	Percent of average	133	100	105	78

Effect of the conservation program on crop production on 5 Coeur d'Alene Reservation units, Idaho

Farm	Practice and years	Average yield, wheat	Average yield, all crops	Total annual production, all crops	Estimated value of annual production
		Bushels	*Pounds*	*Pounds*	
Coeur d'Alene allotments 228, 229, and 230, farmed by William and Warren Armstrong, 388 acres of cropland.	Before conservation practices, 1939, 1940, 1941, 1943, 1944.	19.5	944	213,090	$6,393
	After conservation practices, 1945 to 1950.	20.7	1,108	295,961	8,879
	After conservation practices, 1951 to 1952.	27.3	1,595	440,400	13,212
Coeur d'Alene allotments 426 and 427, farmed by S. J. Bendsten, 280 acres of cropland.	Before conservation practices, 1947 and 1948.	14.6	1,049	174,660	5,240
	After conservation practices, 1949 and 1950.	24.6	1,235	251,448	7,543
	After conservation practices, 1951 and 1952.	29.5	1,633	325,768	9,773
Coeur d'Alene allotments 225, 232, 248, 250, 274, and 276, farmed by George B. Mills and George B. Mills, Jr., 592 acres of cropland.	Before conservation practices, 1940 to 1944.	31.2	1,661	587,920	17,638
	After conservation practices, 1945 to 1950.	32.0	1,663	675,384	20,262
	After conservation practices, 1951 and 1952.	33.6	1,785	786,597	23,598

NAVAJO SOIL-CONSERVATION PROGRAM

Mr. JENSEN. Now, tell us a little bit about how the soil-conservation program is going along on the Navajo Reservation.

Mr. FLORY. Well, the Navajos have responded to that program remarkably well. There had been so many types of programs done on the Navaho Reservation where the whole thing was given to them that it was looked on with a great deal of skepticism when we set up the criterion that we would not do anything unless they asked for it and unless they made a contribution to it.

There is one project involving about 4,000 acres, and there was very serious erosion that was threatening a United States highway. The lands were flooded, and sediment went on down the river. There were 20 Indians who worked there practically all summer without any pay at all to an amount equal to over $13,000 in order to get that work done.

Now they are going to get some stock water, and they are going to get some farmland, and they are going to get about 2,500 acres of rangeland flooded as a result of their work.

I think that is pretty typical. They did all of the labor. In many cases they do not have too much in funds, but there is more work to do than we can provide the necessary technical help for. We do this for them. They do not have any means of hauling, and we furnish them a truck, we furnish them with engineers, and we furnish them a foreman and the large equipment, and then they do all of the manual labor, the fencing, putting in pipe and making riprap walls, masonry, and that sort of thing. We do not have to hunt for any projects. We really have to keep out of their way in order to keep them satisfied.

Mr. JENSEN. Would you say that, as your program goes forward year after year, that more Indians are becoming interested in the job of soil and moisture conservation; and, if so, to what degree?

Mr. FLORY. Well, the interest is almost universal among the Navahos now. We do not have to go into a community any more to try to sell a program to them.

We do carry on a very intensive educational program among the schcolchildren and among the adults, showing them films, showing them the ordinary conservation films which are available. There are a lot of them which are very good, but they are all in English, and the Navajos do not understand it, so some of our Navajo employees take those films and run them, and they take a tape recorder and give a description of them in Navajo in terms of the conditions that they have there.

That has proved to be a very good technique in putting over what conservation is, and even in the most remote communities they come in. We paint all of our equipment orange in color, so the Navajos tell us that they want those fellows in the red wagons to come over and fix up their farm like they did in this community over here. They have seen what has happened there, and those other Navajos tell them what has happened. So the conservationist tells them when they come in with such requests to go back home and organize their group and report back how many people out there will work on the project and when they will be ready to start. That is the way the thing is operating.

Mr. JENSEN. I am looking at some pictures taken of the Tocito watershed.

Mr. FLORY. That is the one I was telling you about where they had contributed $13,000 worth of labor.

Mr. JENSEN. I note that there are some pictures here of ponds. Are they building quite a few retention ponds which will not only hold water but which also will stop the runoff from the uplands? Are they building a lot of those?

DEEP CHARCO PIT-TYPE RESERVOIRS

Mr. FLORY. Well, we have developed in the Indian Bureau something that we are very proud of, a new type of water development like you see in the picture right there. We call them deep-pit charcos. We collect water on a rather flat area for desilting and then carry it into this deep tank through a pipe.

The area or the capacity of the settling area above the pit is at least 1 to 3 times the capacity of the pit, and in that way we have clear water that goes into the pit for stock water. After it is filled no more water runs in. It spreads out around the edge on ranchland.

The old type of stock-water development was a dam across a steep-sided valley or defile or gorge. That impounded water above the surface which meant that you had to provide for a spillway for falling water. Cutting back destroyed many developments. It took intensive and expensive work. In that kind of a situation the vegetation was very poor, cattle trailed down the steep slopes to water. Runoff gullied out these trails and put more sediment in the pond. I know of a case where one such water development filled full of sediment in a single rain.

Geologists in studying these pools say they have a life of at least 50 years. They are deep holes with sloping sides. This dike goes around it which means that you do not get any wave action from winds sweeping across the water surface.

We built 200 of those in the last 18 months. The first one we built was in 1949 on the Papago Reservation. We built that on the basis of what some people who have been over in Algeria told me, that they had always had charcos holding water there, and they have always had water in them. Many of them were over 45 feet deep.

Evaporation in the Southwest country is about 110 inches a year. This accounts for large losses of stored water. In addition much more soaks away through the bottom.

If you only get a runoff every couple of years you have to cut down your surface for evaporation as much as possible, and restrict the area that holds the water as much as possible to decrease percolation. We have done all those things in the deep-pit charcos.

The Indians were kind of skeptical about them at first, but the real test came the year before last, at the end of June during that very bad drought in the Southwest. At that time there were only two surface-water developments on the Papago that had any water in them. That was this new type of charco we had built, and one of the old-type ponds behind a dam. The old-type pond only had a couple feet of water left in it. There were 19 dead cows that got mired down in the sediment which had formed in the upper end of the tank. This is a serious problem in the rangeland in the West. This other charco was

built to hold 24 feet of water. It never had less than 19 feet in it at that time, and never caused the loss of a single head of livestock. From that time on they have been building charcos as fast as they can build them.

Mr. JENSEN. The Indians go in there and use their own equipment, what equipment they have themselves in addition to what the Soil Conservation Service has?

Mr. FLORY. Yes. They have been financed pretty largely through PMA payments. We have got most of our financing for those from PMA, which has been a tremendous help.

Mr. JENSEN. It is dirt filled?

Mr. FLORY. Yes; they are earth filled, and that is what makes them cheap.

Mr. JENSEN. And they are proving very satisfactory?

Mr. FLORY. Yes; they are proving very satisfactory. We are putting out a little booklet on them soon which is based on the experience we have had with them.

INCREASE FOR 1954

Mr. JENSEN. Referring again to this additional $778,328 which you are requesting over and above what you had in the fiscal year which you are now in, will you use part of that for more technicians, or will you use most of it for machinery?

Mr. FLORY. We will use a very large percentage for technicians. That table shows the number of technicians we require. I think it is 47 additional. That is what we need these technicians for to show these people how to do it.

Mr. JENSEN. Yes.

Mr. FLORY. We are having a difficult time getting engineers. Fortunately some of them are now returning from the armed services. They graduate and go into the service and then come back, and we are having some of them return now, so I do not anticipate quite such a difficult job as we had before.

There is one significant point about these charcos that I would like to add. Water is very critical and very vital in the Southwest, and in the case of the old dams they looked for a dam site which often would cover several hundred acres of land with water, which drowned out a lot of rangeland, and it also retained a lot of water up above that should have been permitted to go on downstream for use by people for irrigation.

These charcos only detain the amount of water which is needed for livestock purposes, and the rest of it is permitted to pass on by.

I was talking to the water users of the Salt River Valley not long ago in regard to this program. They have been fighting conservation work there pretty much, and they were very much pleased to learn that we were approaching it in this way, thinking of the water yield of the watershed, as well as using the water in the way necessary in protecting the watershed.

Mr. JENSEN. I have one more question on this item. Does the Soil Conservation Service of the Department of Agriculture and your personnel cooperate fully in this work?

Mr. FLORY. It is practically the same as one service where lands are intermingled. We just got through holding a meeting in Phoenix where many of their State and local, and some of their national

personnel participated in the meeting with us. They had as many people there as we had.

Mr. KIRWAN. How many of those reservoirs have been constructed?

Mr. FLORY. Two hundred.

Mr. KIRWAN. How many more do you expect to construct?

Mr. FLORY. Possibly thousands of them, Mr. Kirwan. You can impound a small amount of water very cheaply in the reservoir and get much better livestock distribution than where you depend on a damsite and impound the water so that there would be no water further on down for other people.

Mr. KIRWAN. You are getting good results from them?

Mr. FLORY. Yes, sir, very good results.

OPERATION, REPAIR, AND MAINTENANCE OF INDIAN IRRIGATION SYSTEMS

Mr. JENSEN. Now we come to "Operation, repair, and maintenance of Indian irrigation systems." I note the budget for 1954 calls for $854,000, which is identical with the figure for the 1953 budget.

Has that been changed any in the revised budget?

Mr. GREENWOOD. No, Mr. Chairman, that remains the same.

REPAIR AND MAINTENANCE OF ROADS AND TRAILS

Mr. JENSEN. The next item is "Repair and maintenance of roads and trails." I note that has been increased in the original budget from $2,270,000 to $2,646,000, an increase of $376,000. Has there been any revision in that?

Mr. GREENWOOD. Yes, sir, that has been reduced $200,000. Our estimate for 1954 with that revision that we have made is $2,446,000.

Mr. JENSEN. How do you justify that additional amount?

Mr. GREENWOOD. The additional amount is required to do a better maintenance job on the roads we have to maintain.

Out of the 20,000 miles of roads that we have to maintain, there are about 8,500 miles that we regularly maintain year-round. That regular maintenance consists of such things as surface smoothing, weed cutting, ditch and culvert cleaning, and snow removal and that sort of thing.

Mr. JENSEN. Yes.

Mr. GREENWOOD. Even with the increase that was in the original estimate, our estimated expenditure per mile of the 8,500 miles we have to maintain can only be $195 a mile, which is a comparatively small amount for this purpose.

In addition to that, we have roads which we only occasionally maintain. There are about 10,970 miles in that category and, with the increase that was requested, we expected to spend about $45 a mile on that type of road.

DEVELOPMENT OF INDIAN ARTS AND CRAFTS

Mr. JENSEN. For the development of Indian arts and crafts you are asking for $45,000 for 1954, which is $487 more than you had last year. What is the story on that?

Mr. GREENWOOD. That, Mr. Chairman, as you may remember, is the program conducted by the Board created by the act of August 27, 1935, to promote the development of Indian arts and crafts and markets for arts and crafts products. The Bureau is simply the housekeeping agency for that Board.

Mr. JENSEN. Do you think that Board is doing any good?

Mr. GREENWOOD. Yes; I think it is. It has been responsible for organizing a number of production groups and assisting them in finding markets. There has been a great demand for the handicraft of Indians; I would say a greater demand for good articles than can be met from the present production.

Mr. JENSEN. Do the Indians get the full benefit that is derived from the actions of this Board?

Mr. GREENWOOD. Yes.

Mr. JENSEN. Or does someone else get some benefit?

Mr. GREENWOOD. No; I would say that the Indians get the benefit. Of course, there is always a markup on the products made by the Indians.

Mr. JENSEN. Yes; I understand.

Mr. GREENWOOD. But the benefits that the Indians get from the Board's activities are pretty direct.

MANAGEMENT OF INDIAN TRUST PROPERTY

Mr. JENSEN. The next item is "Management of Indian trust property." I note the request for 1954 is for $2 million, which is $653,900 more than was allowed last year. Has any revision been made in that item?

Mr. GREENWOOD. Yes, sir; it has been reduced by $200,000.

Mr. JENSEN. By $200,000?

Mr. GREENWOOD. Yes, sir; which would make the present estimate $1,800,000.

Mr. JENSEN. How do you justify the request for $453,900 over and above last year?

Mr. GREENWOOD. Mr. Chairman, this is one of our greatest problem areas. We had a great backlog of work as of the close of the last fiscal year, and the work is constantly increasing. It is just impossible for the present manpower to make a dent in the backlog and keep the current work flowing.

We have about 132 man-years available to us for the performance of this work, which is not enough. As a result, the Indians are complaining. Members of the public who are interested in Indian land are complaining, and even Members of Congress are complaining because we cannot keep on top of this job.

LAND IN TRUSTEESHIP

Mr. JENSEN. How much trustee land has moved into tribal ownership or has been otherwise disposed of during the last 5 years?

Mr. GREENWOOD. I do not have those figures here, Mr. Chairman.

Mr. JENSEN. Will you put them in the record?

Mr. GREENWOOD. Yes, sir; I shall be glad to put them in the record.

(The matter referred to follows:)

A total of 2,630,753 acres of individual allotted land was disposed of from June 30, 1944, to June 30, 1952. Approximately half this amount was converted to tribal ownership.

Mr. GREENWOOD. At the present time about 56 million acres of Indian land are under the jurisdiction of the Bureau in trusteeship. Of that there is about 14,675,000 acres that represent allotted lands still held in Indian ownership. Under various acts of Congress a total of 40,848,000 acres of land was allotted to Indians. Of that, about 26 million acres has passed out of individual ownership. Now, that does not mean it all passed into non-Indian ownership, because the tribes bought some, but a great part of it passed into non-Indian ownership.

The remaining allotted land constitutes a tremendous problem because in so many cases there are numerous heirs to a tract of land. The original allottee has died, and the land has passed to his heirs, and those heirs have died.

Mr. JENSEN. Is it not almost an impossible task to bring the records of the landownership of the Indians up to a current basis or any kind of a basis where you know how much or what portion or what fraction of land is owned by a specific Indian?

Mr. GREENWOOD. Yes; it is a tremendous job. Those records are not current, and as a result it slows down the work in handling these transactions, and it also slows down the probate work.

Mr. JENSEN. How are we ever going to resolve this problem of getting this landownership of the Indians settled? Each year there are more Indians born, and consequently there are more Indians who have an interest in lands. So each year we have a bigger problem.

Mr. GREENWOOD. Yes.

Mr. JENSEN. Do you have any idea as to how we can finally resolve that problem and bring some kind of order out of the chaotic conditions which exist?

Mr. GREENWOOD. We have approached it in several different ways and still have not licked the problem.

One attempt that has been made to eliminate this heirship problem has been to permit the tribes to buy the land which is in individual ownership. That does eliminate individual holdings, and it prevents further fractionation of the land. In some cases we have issued patents in fee to the Indian owners of the land, but, as you say, every year more Indians are born, and every year more Indians die, and as they die they leave heirs who inherit an interest in land, in some cases a very minor fractional interest in this allotted land. I do not know what the ultimate answer is unless we can get it into a fee patent status, but when that is done you run the risk of the Indians themselves losing the land that has been allotted over the years. It is a tremendous real-estate operation, and we just do not have the manpower to keep on top of it.

LANDOWNERSHIP PROBLEM

Mr. JENSEN. Is anything being done to enact legislation to help solve the landownership problem; that is, by the States or by the Federal Government?

Mr. GREENWOOD. There have been bills introduced in Congress that contemplated the appropriation of public funds to purchase these fractionated holdings.

Mr. JENSEN. Well, of course, we have hundreds of millions of acres of federally owned land now. I do not suppose Congress is going to be too anxious to appropriate more money to buy more land.

Just how many acres do the Indians own in fee simple at the present time?

Mr. GREENWOOD. I do not know the answer to that, Mr. Chairman.

Mr. JENSEN. You must know approximately.

Mr. GREENWOOD. Approximately 26 million acres of land which were originally in trust status have passed out of that trust status. Some of that represents fee patents still held by Indians, and most of it represents land that has passed to non-Indians. About 26 million acres out of the originally allotted 40,848,000 acres has passed out of trust status, leaving of the allotted land 14,675,000 acres still held in Indian ownership.

Mr. JENSEN. Still owned by Indians and Indian tribes?

Mr. GREENWOOD. No; that is just individual Indians. There is a total of around 56 million acres of Indian trust land, which means that there are about 40 million acres of tribal lands in addition to the 14,675,000 acres of allotted land.

Mr. JENSEN. Then, in addition to that, the Indians lease some public lands?

Mr. GREENWOOD. Yes.

Mr. JENSEN. For grazing and farming?

Mr. GREENWOOD. For grazing purposes.

Mr. JENSEN. Do you know how many acres of land the Indians lease?

Mr. GREENWOOD. It does not amount to much.

I think the Navaho Tribe leases more land for grazing purposes than any other single tribe.

There is one other thing that has increased our difficulties in this particular field, and that has been the increasing interest in recent years in oil and gas developments on Indian lands. That has been particularly true in the States of Montana, North and South Dakota, Utah, Colorado, and New Mexico. As of June 30, 1952, there were in effect 10,948 oil and gas leases.

Mr. BUDGE. Why is it necessary for the Government to do all of the legal work in connection with probating these estates? Do not the tribal attorneys do some of that?

Mr. GREENWOOD. No, sir. The Secretary of the Interior, by law, is given the responsibility for probating Indian trust estates, with the exception of Oklahoma, where that is done by the local probate courts.

REPAIR AND MAINTENANCE OF INDIAN IRRIGATION SYSTEMS

Mr. JENSEN. Going back to the operation, repair, and maintenance of Indian irrigation systems, I have a memorandum here which was handed to me by some employees of the Appropriations Committee who are doing some research on the operations of the Bureau of Indian Affairs. I shall read this, as it is not too long. I shall read it into the record, and then I shall ask you to comment on it.

Although the Bureau of Indian Affairs has over 300 different Indian irrigation developments under its jurisdiction, the 10 largest projects comprise more than 78 percent of the total constructed works.

Some of the Indian projects—namely, Wapato, Flathead, San Carlos, and Colorado River—are multiple-purpose works containing both power and irrigation features. The Lummi project in the State of Washington was constructed primarily for diking purposes. The remaining Indian irrigation projects provide only irrigation facilities. During the 25-year period from 1927 to 1952, the areas

farmed by Indians on Indian irrigation projects increased 31 percent compared to the increase of 73 percent for non-Indians. During this same period, ownership status of the Flathead project completely reversed itself from 88,765 Indian-owned acres in 1927 to 18,610 Indian-owned acres in 1952, and from 23,735 acres of non-Indian-owned lands in 1927 to 89,231 non-Indian-owned acres in 1952.

Now, would you care to comment on that statement?

Mr. GREENWOOD. Well, I think the statement is approximately correct. Actually only two of the projects named there are multi-purpose projects. One is the Flathead project, and the other is the San Carlos project.

The Flathead project does involve the distribution and sale of power within the project area and areas adjacent to the project, but no power other than that from a small hydro plant is generated. It is all purchased power.

In the case of the San Carlos project we do have some gas-operated generating facilities and a hydro plant at the dam, but there again the larger amount of the power that is distributed through the system is purchased power.

In those two cases under existing law the power revenues are first applied to the operation and maintenance of the system; secondly, to repay the investment of the United States in the power system; and thirdly, to repay the cost of the irrigation system. So ultimately the capital investment of the United States in those projects will be returned to the Treasury.

Mr. JENSEN. What I want to know is, Why is it necessary at this time to appropriate anything for this purpose in view of the statement I have just read?

Mr. GREENWOOD. Well, as a matter of fact, Mr. Chairman, very little money is appropriated which goes into the Flathead, Wapato, or San Carlos projects. Most of the costs are met through collections from water users. The amount of appropriated money that is going in is used to pay the assessments of Indians who are unable to pay their full assessment, and it would not be fair, of course, to assess costs chargeable against their lands to the other water users.

Mr. BUDGE. Well, that is the very purpose of an irrigation district. That is why you set it up.

Mr. GREENWOOD. For assessing the lands benefited by the distribution of water?

Mr. BUDGE. Yes, sir; you set up an irrigation district so that if some of the water users default in their payments all of the land within the district bears the burden of this default.

Mr. GREENWOOD. Well, that has not been so traditionally with the Indian projects. For 1953 there has been appropriated only the amount of money necessary to pay the charges assessed against Indian lands where the Indian landowner is unable to pay his assessment.

Mr. JENSEN. If these projects have brought such great benefits to the Indians, the benefit from this fund that has been appropriated over the years, certainly the tribal council should assume more financial responsibility for these irrigated trust lands; would not that follow?

Mr. GREENWOOD. Well, originally part of the tribes' funds were used in the construction, as well as the operation and maintenance of the systems.

In some of those cases Congress has later appropriated money to reimburse the tribes because of the fact that it was not considered a benefit to the tribe as a whole, but a benefit to the individual landowners. In other words, it is not a tribal charge or a tribal benefit, but a benefit to the individual landowner.

Mr. JENSEN. I am wondering, then, if the individual landowners have contributed their fair share to this kind of a program.

Mr. GREENWOOD. We have always made an effort to collect from those who were able to pay but, of course, you always find a certain number of them who are operating on a purely subsistence basis and cannot meet their irrigation charges.

Mr. FLORY. The last thing that Mr. Greenwood mentioned is the real reason behind the nonpayment, Mr. Chairman, because most of those projects are on 10- to 20-acre allotments which were set up on a subsistence basis in the beginning, and it is impossible for those people to make a living off those places and pay irrigation charges. Tney were not set up as units adequate to make a living on. A mistake was made when such small units were set up in the beginning.

Mr. BUDGE. What has been the experience in the last few years relative to your having to pick up the assessment payments. Is that increasing or decreasing?

Mr. GREENWOOD. It has improved right along. More and more Indians are paying at least a part of their assessments.

Mr. BUDGE. I can see where there would be very little incentive for the Indian himself to make the payments when he knows that the Government will pay them if he does not pay.

Mr. GREENWOOD. Of course, he is not assured of that. What is available depends on the action of Congress, so he is not assured that they will be paid Our irrigation people attempt to urge the Indians to conduct their farming operations in such a way that they can get above subsistence level and provide enough to pay the assessments.

Mr. BUDGE. I think it is very unfortunate that those projects were built in the manner that you have described. That is certinaly a mistake.

REPAIR AND MAINTENANCE OF BUILDINGS AND UTILITIES

Mr. JENSEN. The next topic will be "Repair and maintenance of buildings and utilities." There was a request for 1954 for $2,560,000. An increase of $787,626 was allowed for this item. Has there been any revision made in this item?

Mr. GREENWOOD. Yes, Mr. Chairman, it has been reduced by $200,000 to provide a total of $2,450,000.

Mr. JENSEN. Can you justify that addition?

Mr. GREENWOOD. The additional amount is to enable us to do a better maintenance job on the buildings and utilities that we have to maintain. During the war years—this is true of the First World War as well as the Second World War—the amount for maintenance was reduced substantially, and a considerable amount of deferred maintenance work accumulated. Many of our buildings are very old buildings. Some of them are 50 or more years old, buildings that in some cases we took over from the military when they were administering Indian affairs, so that we have had a bad problem from the standpoint of the age of the facility as well as from the

standpoint of not having had enough money through the years to do an adequate maintenance job.

Mr. JENSEN. How much of this amount is for labor and how much for materials?

Mr. GREENWOOD. About 50 percent would be expended for labor and 50 percent for materials.

Mr. JENSEN. The total then of what you are asking for under the revised budget is $2,450,000?

Mr. GREENWOOD. That is correct.

Mr. JENSEN. These buildings are all on Indian land or are facilities which are used for the benefit of the Indians.

Mr. GREENWOOD. That is correct. Some of them are located on Government land.

Mr. JENSEN. I understand that.

Now, can the Indians repair, maintain, and paint and do a lot of the things themselves? Aren't they willing to do that rather than come to the Government?

Mr. GREENWOOD. These are not Indian-owned buildings. These are schools and hospitals.

Mr. JENSEN. I realize that. But after all the Indians are getting the benefit. It seems to me that they should be willing to help keep up the repair, paint wherever it is needed, without hiring that help and spending money. Of course, those are repairs and painting that they could do themselves in many instances. I wonder if we have given them a chance to do it.

Mr. GREENWOOD. I would say in most cases, Mr. Chairman, they just can't afford to. They have to earn a living.

WEED CONTROL

Mr. JENSEN. All right. The next item is "Weed control." You have $300,000 for that item last year and I note that you have the same amount for this year.

Mr. GREENWOOD. Yes.

Mr. JENSEN. Now, this is brought about mainly by the seeding of grasses which smother out the weed; is that right? This uses up the minerals in the ground that the weeds thrive on when you plant this seed. This happens when you seed certain areas. I know that is true of the halogeton plant. The way you can eradicate the halogeton plant is to seed grasses in those infested areas and by so doing the grasses starve off the weeds.

Mr. GREENWOOD. Mr. Chairman, if I may interrupt, this entire $300,000 is devoted to the eradication of the halogeton plant. This is our part of the halogeton program.

Mr. JENSEN. I was wondering about that. Some members of the committee, including myself, visited the infested areas in northern Wyoming and Idaho last year, during last summer, and while it was a new problem, so to speak, it was still the same old thing. We still had only one remedy and that was to seed grasses which would starve off the weeds. Now, what is the latest report on the success of that program which we have in operation now to starve out the halogeton plant?

Mr. FLORY. There has been quite a bit of research done by Utah, Idaho, and Nevada State experimental stations. The Bureau of

Plant Industry and the Bureau of Land Management have been participating also.

After doing their additional research, which was almost the primary or first research, they have just about come back to the original conclusion which was based more or less on the observation which you just made; and that is, the only real control is to establish grass as a competitive vegetation. If you have plenty of grass present which the stock can eat, they won't eat halogeton entirely, and losses can be prevented. The stock won't pick halogeton up purposely and eat it, because it isn't too palatable.

Halogeton comes in where the vegetation has been beaten out around trails and bed grounds and watering places. In those places it is pretty difficult to get grass established, and so we have to resort to chemical control in such places. That is just about the extent of what we know about controls at the present time.

However, there is one promising thing about it. This grass has to be properly managed so it will make the maximum amount of forage growth, which means you have to leave some of it. That is our whole conservation problem. If the stock eat it level to the ground, it won't offer any competition to halogeton.

NEED FOR MORE SOIL-CONSERVATION WORK

Mr. JENSEN. If I had my way, as you folks are well aware, I would spend more money to seed the western ranges because of the very fact that, after all, this is not only soil conservation but it is flood prevention; that is, preventing the rainfall from washing the topsoil and the mud into the stream.

Certainly we have to have vegetation and the right kind of vegetation to do that job. It all works together.

I know we would receive great returns in a few years from the money that we spend for a grass-seeding program on the western ranges and on the mountainsides if it could be sown by airplanes. I still think the old airplane seeding program, the pollen-seeding program, would prove successful if it were properly handled.

Now, I am not going to oppose this item. I know what a menace that halogeton weed is. I know that it has already been the means of killing a lot of cattle and sheep. It is a problem that is too big for the people themselves to handle. But I am not at all satisfied, and I don't think the people generally are satisfied who have looked into this weed problem of the western ranges, with what is being done to bring about a greater vegetation on the ranges. Instead of conserving our soil, we are letting it erode at a rate that is criminal. It can't be justified by any stretch of the imagination, but it is just one of these things the Federal Government is not going to appropriate all the money for. The farmers, the townspeople, the landowners, the Indians, and the States are all going to have to get into this fight with us because it is going to take all the money we can get to do the job that we should be doing.

I get sick when I travel over western ranges and see what is happening to that soil. It doesn't look very good now, but with the proper kind of soil and moisture program and the proper land-management program that land could be made productive in a few years and it could be kept that way for posterity instead of being washed off and

blown off at a criminal rate as is happening today. So I certainly hope that we can go forward on that program. We are doing very well on private land today. We have caught up with the erosion problems. We are just about holding our own now. We are going to whip it on private lands, and I will venture that within the next 20 years we will have the soil-erosion program pretty well whipped. But here we have this terrific problem on Government-owned lands and on Indian lands that we can't set our sights on. This committee has done what it can to appropriate money, even over and above the budget. You are speaking for soil conservation on the public domain, but we haven't got enough people interested in that program yet. I think it is one of the most important things that we can do today if we want to leave to our children and their children the kind of country we would want to live in. Here we have the population increasing over 2 million a year. We have had bumper crops for 10 years, and yet we have surpluses scarcely worthy of the name. Now, one of these fine days we are going to wake up to the fact that we have not taken care of our public domain properly, and because of that we are going to have a scarcity of food and fiber when the good Lord decides that we are not appreciative of all the blessings that He has bestowed on us. We are very apt to find food prices advanced at a rate that we have never dreamed of.

Of course, I have worked on this thing so long that maybe it is getting tiresome to some folks, but I am going to keep on working on it until we get something done to conserve our precious soil on the public domain. It may look terrible when you look at it. It will look like it's beyond reclaiming, but most of it isn't beyond reclaiming. It is our job to see to it, and likewise it is the job of the folks here today to see to it that we stop that erosion to the degree that we have the ability to do it. I hope the Indian Service will never quit taking a very active interest in the conservation of our soil on Indian land. I am happy to see that the budget allowed more money this year for soil conservation on public lands. This came about because of this committee insisting on that. So we are making a little headway. I don't like to spend money that we shouldn't spend, and I don't, but this is one place that we have to spend more money on. Then there are thousands of other places where we have to spend less money. So, again, I say, "Let's put our hands and our hearts to the task of doing this job that must be done."

Mr. Flory, I am sure, is doing a good job. He has soil conservation in his blood. I have talked to him a lot of times, not only in this committee, but he comes to my office, and I meet with him at meetings. But he can't do it alone. I know he has a lot of good help, and I am happy to know he is getting more as time goes on.

Mr. Budge. I know quite a bit about this subject. I think the statements are correct as to the only means of combating the problem.

Mr. Flory. One thing. It is kind of a bad thing to say, but at the same time maybe it is fortunate that halogeton came along so that we have to manage the ranges to get maximum forage production and plant vigor to fight halogeton. The Soil Conservation Service made a study over a period of 5 years in New Mexico and found that the ranges that were in poor condition earned only $1,200 per section per year; and ranges in fair condition, $1,700 per section per year; and, in good condition, $2,300 per section per year. So our large stockmen

are just cutting off their own pocketbooks when they continue to overuse these ranges, and halogeton is going to force them to utilize them more properly, which will mean more money in their pockets in the long run.

Mr. BUDGE. Of course, we can't place all the blame on the livestock men. On the ranges in the West we find all of these infestations, whether weed or insects or fungus or something else, and they usually start first on the public domain and spread onto the private property. It is a real problem for us in our State fiscal affairs to prevent the spread from the public domain to the private. It is a very real problem.

TRAVEL FUNDS

Mr. Greenwood, very quickly here, I was adding up your items for travel. I find that the Bureau of Indian Affairs is requesting this year $1,852,327 to travel, an increase of almost $200,000 over the last fiscal year. How would you justify that?

Mr. GREENWOOD. Well, that is spread throughout our activities, Mr. Budge. It is related to some extent to the increased personnel in the 1954 budget contemplated for extension work, soil and moisture work, forest and range work, and our placement activities. Our field people necessarily have to do a considerable amount of travel because the areas over which they have jurisdiction are large. Take the Navajo, for example. There are 15 million acres of land, 25,000 square miles, under the jurisdiction of the Window Rock office. That necessarily demands a considerable amount of travel by the staff people in order to reach the areas that have to be administered.

Mr. BUDGE. Of course, all the items aren't in those programs. Your health education and welfare is your largest one, but even in your general administration you want an additional eleven and a half thousand dollars.

Mr. GREENWOOD. That is correct. Part of that is because in the last 3 years we have centralized our business or housekeeping functions—our accounting work, personnel management, and property management—at our area offices. Now, that requires that the staff in charge of those programs travel out to the outlying agencies to perform their functions. That is the principal reason for the increase in that particular item.

Mr. BUDGE. It just seems to me that that total of almost $2 million is somewhat disproportionate. That is quite a lot of travel.

Mr. GREENWOOD. It is a lot of travel. As I said before, in order to perform the functions for which they are employed, it is necessary that a considerable portion of our staff, especially in the resources field, do a large amount of traveling each year.

UNEXPENDED BALANCE

Mr. NORRELL. How much unexpended money, not unallocated, but unexpended money do you have in your total appropriation at this time? Give it to me as recent as you can.

Mr. GREENWOOD. We have just finished preparing a statement, Mr. Norrell.

Mr. NORRELL. Don't go over it. Just sum it up and give me the total money and the date, if you can.

Mr. GREENWOOD. I don't have that statement. I will be glad to put it in the record if it will serve the purpose.

Mr. NORRELL. Let's figure it out. Do you have a total for January 1? Certainly, you looked it up sometime or other since July 1. Give it to me as recently as you can.

Mr. GREENWOOD. Here is a statement as of December 31, 1952. The total amount available for obligation in this fiscal year is $100,657,929. The total amount unexpended is $71,451,375.

Mr. NORRELL. Now, is that the total amount of all appropriated funds that you had as of that date on hand?

Mr. GREENWOOD. Yes, sir.

Mr. NORRELL. Including carryovers in previous years?

Mr. GREENWOOD. Yes, sir. We carried over from the last fiscal year a total of $16,585,098 and the new appropriation for the fiscal year 1953 amounted to $86,080,407, which included $2,039,826 for liquidation of prior year contractual authorization, so the $100 million was representing carryovers, as well as new appropriations.

Mr. NORRELL. Now, how are you getting along, summing it up, regarding Indian management? Are you making any progress toward liquidation of any of the activities the Government now carries?

Mr. GREENWOOD. Yes. Our principal effort, as you may remember, has been concentrated in California and western Oregon. We are making very substantial progress.

Mr. NORRELL. You are satisfied, I assume, with the progress that you are making so far?

Mr. GREENWOOD. Yes, sir. Further progress will be prevented to some extent pending the enactment of legislation that is needed to give certain authorities to us which are necessary to complete the withdrawal program in those areas.

CONSTRUCTION

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$8,830,000	$16,120,000	$20,869,000
Prior year balance available	13,603,459	13,282,212	1,343,912
Reimbursements from non-Federal sources	2,575	3,000	3,200
Reimbursements from other accounts	93,636	125,500	
Total available for obligation	22,529,670	29,530,712	22,216,112
Balance available in subsequent year	−13,282,212	−1,343,912	
Obligations incurred	9,247,458	28,186,800	22,216,112

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
1. Buildings and utilities	$4,810,804	$17,812,492	$13,771,912
2. Roads and trails	1,511,452	4,499,551	4,500,000
3. Irrigation systems	2,761,916	5,560,684	3,941,000
4. Land acquisition	67,075	185,573	----------
Total obligations from appropriated funds	9,151,247	28,058,300	22,212,912
Reimbursements from non-Federal sources:			
5. Replacement of personal property sold	2,575	3,000	3,200
Total direct obligations	9,153,822	28,061,300	22,216,112
Obligations Payable Out of Reimbursements From Other Accounts			
1. Buildings and utilities	40,198	12,500	----------
2. Roads and trails	10,548	75,000	----------
3. Irrigation systems	42,890	38,000	----------
Total obligations payable out of reimbursements from other accounts	93,636	125,500	----------
Obligations incurred	9,247,458	28,186,800	22,216,112

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions	361	438	430
Full-time equivalent of all other positions	576	878	917
Average number of all employees	886	1,284	1,322
Average salaries and grades:			
General schedule grades:			
Average salary	$4,810	$4,931	$4,859
Average grade	GS-7.4	GS-7.5	GS-7.2
Crafts, protective, and custodial grades:			
Average salary	$4,164	$4,264	$4,362
Average grade	CPC-8.1	CPC-8.2	CPC-8.2
Personal service obligations:			
Permanent positions	$1,434,670	$1,820,470	$1,850,363
Part-time and temporary positions	2,108,892	3,156,695	3,307,172
Regular pay in excess of 52-week base	5,518	7,096	7,117
Payment above basic rates	28,139	28,671	35,784
Total personal service obligations	3,577,219	5,012,932	5,200,436
Direct Obligations			
Appropriated funds:			
01 Personal services	3,577,219	4,935,290	5,200,436
02 Travel	140,030	165,900	165,000
03 Transportation of things	69,210	101,900	100,000
04 Communication services	16,402	19,845	20,000
05 Rents and utility services	24,702	35,215	30,000
06 Printing and reproduction	2,374	3,975	2,500
07 Other contractual services	1,881,235	4,839,375	3,000,000
08 Supplies and materials	1,519,713	3,270,266	2,500,000
09 Equipment	546,578	873,090	800,000
10 Lands and structures	1,403,406	13,841,430	10,421,209
Subtotal	9,180,869	28,086,286	22,239,145
Deduct for quarters and subsistence	29,622	27,986	26,233
Total obligations from appropriated funds	9,151,247	28,058,300	22,212,912
Reimbursements from non-Federal sources:			
09 Equipment	2,575	3,000	3,200
Total direct obligations	9,153,822	28,061,300	22,216,112

Obligations by objects—Continued

Object classification	1952 actual	1953 estimate	1954 estimate
Obligations Payable Out of Reimbursements From Other Accounts			
01 Personal services		$77,642	
03 Transportation of things		3,750	
07 Other contractual services		5,858	
08 Supplies and materials	$93,636	38,250	
Total obligations payable out of reimbursements from other accounts	93,636	125,500	
Obligations incurred	9,247,458	28,186,800	$22,216,112

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$11,330,165	$6,754,053	$12,932,353
Obligations incurred during the year	9,247,458	28,186,800	22,216,112
Total	**20,577,623**	**34,940,853**	**35,148,465**
Deduct:			
Reimbursable obligations	96,211	128,500	3,200
Obligations transferred to "Construction (liquidation of contract authorization), Bureau of Indian Affairs"	1,745,000	1,380,000	
Unliquidated obligations, end of year	6,754,053	12,932,353	14,145,265
Total expenditures	11,982,359	20,500,000	21,000,000
Expenditures are distributed as follows:			
Out of current authorization	11,982,359	6,000,000	7,500,000
Out of prior authorizations		14,500,000	13,500,000

CONSTRUCTION (LIQUIDATION OF CONTRACT AUTHORIZATION), BUREAU OF INDIAN AFFAIRS

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$1,745,000	$1,380,000	
Applied to contract authorization	−1,745,000	−1,380,000	
Obligations incurred			

Analysis of expenditures

Obligations transferred from "Construction, Bureau of Indian Affairs" (total expenditures out of appropriations to liquidation of prior year contract authorization):

1952 ..... $1,745,000
1953 ..... $1,380,000

BUILDINGS AND UTILITIES

BUDGET REVISION

Mr. JENSEN. Turning to construction. Now, the first item is "Buildings and utilities." I note that you have asked for a big increase over last year for this item. It goes from $6,934,000 in 1953 to $12,428,000 for 1954, or an increase of $5,494,000. Has there been any revision in that item?

Mr. GREENWOOD. Mr. Chairman, I will have to answer that by saying that the total amount of the original estimate for all construc-

tion—buildings and utilities, roads, and irrigation systems—was $20,869,000. A reduction of $5 million has been made in that total. We have not yet distributed that $5 million reduction among the three construction activities. That brings the total estimate down to $15,869,000, as compared to $17,500,000 for this fiscal year.

Included in the $20,869,000 original estimate, there was $12,808,000 for the Navajo and Hopi 10-year program which was authorized by the act of April 19, 1950. That act authorized appropriations totaling $88,570,000 over a 10-year period. The program provides for the construction of additional roads, construction of educational facilities, health facilities, and the performance of soil and moisture conservation and range-improvement work.

NAVAJO-HOPI REHABILITATION PROGRAM

Mr. JENSEN. We have a table here dated January 29, 1953, entitled "Bureau of Indian Affairs, Progressive Statement of Appropriations for Navajo and Hopi 10-Year Program Applied to the Categories Contained in Public Law 474, 81st Congress," which sets out the program in fiscal year 1951 to and including the budget request for 1954.

Without objection, we will place that table in the record.

(The material referred to follows:)

Progressive statement of appropriations for Navajo and Hopi 10-year program applied to the categories contained in Public Law 474, 81st Cong

	Rehabilitation authorization, Public Law 474, 81st Cong. (1)	Appropriation, 1951 (2)	Appropriation, 1952 (3)	Appropriation, 1953 (4)	Budget allowance, 1954 (5)	Balance available under authorization (column 1 minus columns 2 through 5) (6)	Appropriation title in regular Interior Department appropriation bill
1. Soil and moisture conservation and range-improvement work	$10,000,000	$300,000	$538,300	$570,000	$746,500	$7,845,200	Resources management.
2. Construction, irrigation projects on Navaho	9,000,000	567,475	277,300	495,000	756,000	6,904,225	Construction.
3. Surveys and studies of timber, coal, minerals, etc	500,000	15,545	125,000	125,000	125,000	109,455	Resources management.
4. Development of industrial and business enterprises	1,000,000	52,000	52,000	52,000	52,000	792,000	Do.
5. Off-reservation employment	3,500,000	194,600			505,559	2,799,841	Health, education and welfare.[1]
6. Relocation and resettlement of Navaho-Hopi Indians (Colorado River Reservation)	5,750,000	800,000	387,500	442,000	430,000	3,690,500	Construction.
7. Roads and trails	20,000,000	960,000	858,000	1,430,000	1,500,000	15,252,000	Do.
8. Telephone and radio communication systems	250,000	105,200	88,000	100,000	100,000	−143,200	Do.
9. Agency, institutional, and domestic water supply	2,500,000	542,200	136,000	125,000	200,000	1,496,800	Do.
10. Revolving loan fund	5,000,000		800,000	1,000,000	1,000,000	2,200,000	Revolving fund for loans.
11. Hospital and health facilities [2]	4,750,000	742,300	340,000	1,395,000	360,500	1,912,200	Construction.
12. Educational facilities [2]	25,000,000	3,994,800	3,073,000	3,375,000	8,911,500	5,645,700	Do.
13. Housing and necessary facilities and equipment	820,000	26,300				793,700	Do.
14. Common service facilities	500,000	345,100		150,000		4,900	Do.
Total	88,570,000	8,645,520	6,675,100	9,259,000	14,687,059	49,303,321	

[1] The 1951 program was the construction of an overnight lodge for the Indians and was carried in the construction title of the 1951 appropriation.
[2] For construction of facilities.

IRRIGATION PROJECTS

Mr. JENSEN. Now, our research staff has handed me the following memo:

Pertinent statistics on the 10 projects are shown in the attached schedule; it should be noted that only 9.7 percent of the acres under constructed works are actually farmed by Indians.

We will insert in the record this list of the 10 major projects.
(The material referred to follows:)

Use of Indian irrigation projects, 10 major projects

Name of project	Acres under constructed works, 1952	Percent of constructed works owned by Indians	Percent of constructed works farmed by Indians	Percent of constructed works not irrigated [1]	Indian crop value, calendar year 1951	Non-Indian crop value, calendar year 1951 [2]
Wapato	125,751	61.3	6.2	10.62	$912,853	$20,040,494
Flathead	107,841	17.3	3.2	13.90	146,421	3,745,502
Uintah and Ouray	83,989	64.2	9.4	27.01	176,017	1,655,632
San Carlos	100,000	50.0	12.3	61.13	855,071	6,265,568
Wind River	50,457	73.1	14.2	31.50	195,352	1,027,227
Fort Hall	54,425	69.1	14.4	36.38	325,419	2,500,259
Crow	44,073	73.5	2.6	24.00	76,027	1,741,195
Blackfeet	41,264	73.5	.8	95.00	112,232	666,628
Fort Peck	27,829	81.1	14.0	63.99	105,462	221,100
Colorado River	32,646	100.0	39.8	21.90	850,000	2,461,607
Total	668,275	58.0	9.7	33.3	3,754,840	40,325,212

[1] Not being used as irrigated lands.
[2] Non-Indian crop value includes value of lesser crops farmed on Indian-owned leased lands.

Mr. GREENWOOD. If all the Indian irrigation projects had been included in the tabular statement, it would show that 45 percent of all Indian-owned lands in such projects are actually farmed by Indians.

SAN CARLOS PROJECT

Mr. BUDGE. This San Carlos project. I note in there you have an item $473,000 for power construction. One of the primary justifications for that seems to be because of interrupted service to a copper mine. Who operates the copper mine and on what basis?

Mr. GREENWOOD. That is a privately owned copper mine. It is one of our power customers. We are in the power business in a rather large way on the San Carlos project.

Mr. BUDGE. I note that.

Mr. GREENWOOD. And the system is in bad shape. There is a great number of outages, occurring time after time, and, of course, the power customers are complaining about it and it is in some cases interrupting production that is needed in the defense effort. This is not new construction primarily. It is rehabilitation of the existing system and the expenditures here will come back to the Treasury from the power revenues ultimately.

Mr. BUDGE. Do you have a schedule set up so you can show the committee that that will be self-supporting?

Mr. GREENWOOD. Under existing law, power revenues must be applied first to operation and maintenance and secondly to repay the United States for its investment.

Mr. BUDGE. What does that private copper company pay per kilowatt-hour?

Mr. GREENWOOD. I do not have the rates, but it would be on a sliding or graduated scale. I will be glad to put that in the record.

Mr. BUDGE. I would appreciate that if you would—the amount they pay for kilowatt-hours and also your costs for production and delivery.

(The matter referred to follows:)

SAN CARLOS PROJECT POWER

Cost of power to Copper Mining Co. for a typical month:
1.8 cents per kilowatt-hour for 1st 25 kilowatt-hours per kilowatt of billing demand.
1.2 cents per kilowatt for next 100 kilowatt-hours of billing demand.
0.9 cents per kilowatt for all additional kilowatt-hours.
Average cost to company, 9.8 mills per kilowatt-hour.
Cost of project for production and delivery:
1.61 cents per kilowatt-hour for 1st 25 kilowatt-hours per kilowatt of billing demand.
1.13 cents per kilowatt for next 100 kilowatt-hours per kilowatt of billing demand.
0.83 cents per kilowatt-hour for all additional kilowatt-hours.
Average cost of project, 9.1 mills per kilowatt-hour.
Total energy taken, 1,560,496 kilowatt-hours.
Billing demand, 2,348 kilowatt-hours.

Mr. GREENWOOD. This is the project I mentioned earlier where we generate some power and buy a much larger amount of power. The hydro plant that we have at the Coolidge Dam operates only when there is water in the reservoir and since the dam was built the reservoir has never been filled. It was built to store about 2¼ million acre-feet of water and the most we have ever had in the reservoir area since the construction of the dam was about 900,000 acre-feet. I don't have a late figure on it, but I would guess that it is down to around 15,000 acre-feet.

Mr. BUDGE. When your plant isn't operating, where does the copper company get electricity?

Mr. GREENWOOD. We buy power and furnish it through our distribution system.

Mr. BUDGE. In other words, you buy it as a wholesaler and then you retail it to the private company?

Mr. GREENWOOD. That is true. A great bloc of power we buy from the Reclamation Service.

Mr. BUDGE. I have just one other question. Why couldn't the power company buy that power directly without your having to intervene?

Mr. GREENWOOD. Because it has to be carried over our transmission system.

Mr. BUDGE. You could charge them wheeling charges?

Mr. GREENWOOD. I suppose we could work it out on that basis. Of course, it is helpful to the project to have that business because it will ultimately repay the investment in our power system and repay the irrigation charges against the land.

Mr. BUDGE. Yes, making a profit, that is true.

UNOBLIGATED BALANCES

Mr. JENSEN. What were the unobligated balances in the construction fund as of June 30, 1951 and 1952, and what is the estimated unobligated balance as of June 1, 1953?

Mr. GREENWOOD. I will have to furnish that for the record. I don't have the 1951 and 1952 balances.

Mr. JENSEN. Have you an estimate of the unobligated balances?

Mr. GREENWOOD. We carried over into this fiscal year from last fiscal year approximately $13 million.

Mr. JENSEN. $13 million. Then what do you estimate you will carry over as of June?

Mr. GREENWOOD. It is estimated as $1,343,912.

Mr. JENSEN. Why was it so great as of June 30, 1952?

Mr. GREENWOOD. It is largely due to the fact we were just getting the Navaho and Hopi program under way. We couldn't do much in the way of preparing plans for a project before we got the appropriation for the project itself. That is rolling now and we expect to have under construction all projects for which we have money by the close of this fiscal year.

Mr. JENSEN. All right.

SCHOOL CONSTRUCTION

Mr. JENSEN. How much of this request is for day schools and boarding schools? Can you find that figure? If not, put it in the record.

Mr. GREENWOOD. It is $9,729,500.

Mr. JENSEN. Where will it be spent?

Mr. GREENWOOD. Mostly on the Navaho and Hopi Reservations.

Mr. JENSEN. What kind of construction?

Mr. GREENWOOD. On the Navaho we are converting a large number of day schools to small boarding schools. There is $6,750,000 in the budget for that purpose.

Mr. JENSEN. Now, for the record, give us the day-school and boarding-school figures.

Mr. GREENWOOD. The day school is operating on the basis of pupils who will either be bussed in, or walking, for daily instruction, just like an ordinary public school. The only meals served will be the noonday luncheons. Outside of that, they operate just like a day school under the public-school system. We have two types of boarding school. One is a full-time boarding school where the students are kept in dormitories and in classes during the daytime practically the whole year, at least a greater part of the year the bulk of the school population is boarded.

Mr. JENSEN. Older children?

Mr. GREENWOOD. In some cases, young children coming from broken homes, and some who are orphans. Then we have the so-called 5-day boarding schools on the Navaho Reservation. They are operated on a boarding basis for 5 days a week and the children go home on weekends.

Mr. JENSEN. Is there any charge for Indian pupils?

Mr. GREENWOOD. No, sir.

Mr. JENSEN. It is all free?

Mr. GREENWOOD. Practically all free.

Mr. JENSEN. Do the parents have to see to it that the children get to school?

Mr. GREENWOOD. Yes.

TRANSPORTATION TO AND FROM SCHOOLS

Mr. JENSEN. You don't transport the children to those boarding schools, do you?

Mr. GREENWOOD. Oh, yes, we bus them in or bring them in by train in a few instances. Most of the transportation is by bus.

Mr. JENSEN. You don't have to bring them in every day, because they come amd board and stay, but you do bring them in and when they want to go back home, what do you do?

Mr. GREENWOOD. We take them back at the end of the school term.

Mr. JENSEN. What I am trying to figure out is whether you take them back during the week.

Mr. GREENWOOD. No, sir.

Mr. JENSEN. You bring them in at the beginning of the term and you return them at the end of the term?

Mr. GREENWOOD. Yes.

Mr. JENSEN. That is all you do?

Mr. GREENWOOD. Yes, sir.

Mr. JENSEN. If they want to go home during the week that would be on their own?

Mr. GREENWOOD. That is correct.

SCHOOL CONSTRUCTION ON NAVAJO RESERVATION

Mr. JENSEN. Now, how many elementary schools are you planning to build on the Navajo Reservation out of this fund and how much do you propose to spend for each student?

Mr. GREENWOOD. Well, there is $6,750,000 that I mentioned for day-school conversion, that is, conversion of day schools to boarding schools. They will all be elementary schools, I believe. Isn't that correct, Mrs. Thompson?

Mrs. THOMPSON. That is correct.

Mr. JENSEN. They will all be elementary schools. How many pupils will those schools accommodate?

Mr. GREENWOOD. In most cases there are pupils already in the schools. This program will expand the facilities of the schools. At the schools we have in the estimate, we are now accommodating 878 pupils. After conversion, they will accommodate 1,344 pupils, an increase of 466 pupils.

Mr. JENSEN. Will this amount complete this construction or will you come in and ask for more money next year?

Mr. GREENWOOD. This is only part of the long-range program, Mr. Chairman.

Mr. JENSEN. That is what I want to know. How much do you propose to spend over the entire period?

Mr. GREENWOOD. Well, the authorization in the long-range act was $25 million for schools but that was based on costs at that time.

Mr. JENSEN. At that time?

Mr. GREENWOOD. 1945 or 1946, before the drastic rise in construction costs. That $25 million has probably doubled since the original estimate was made.

Mr. JENSEN. Will these be of brick and stone construction or wood construction?

Mr. GREENWOOD. They are mostly frame construction. In some cases, concrete blocks.

Mr. JENSEN. Mrs. Thompson, did you have anything you would like to say in this connection?

Mrs. THOMPSON. No, Mr. Chairman, unless you have questions that you would like me to answer. This construction is aimed, of course, to get more children in school and to make usable the plants which were already there which were located on spots on the reservation where there was water. This still does not complete the problem as Mr. Greenwood said.

Mr. JENSEN. I understand that.

Mrs. THOMPSON. There are 13,000 children still out of school. This measure is only the beginning of solving the problem.

Mr. GREENWOOD. I might say, Mr. Chairman, we don't plan to build facilities for all of the children who are presently on the Navajo Reservation. We recognize that the Reservation is capable of supporting only about half of the present population and we are building in terms of school facilities for one-half of the population.

Mr. JENSEN. Are you building small schools, one-teacher schools on the reservation?

Mr. GREENWOOD. No. This program up to now has been directed toward providing facilities for from 60 to 120 pupils. Where boarding facilities are necessary, it isn't economical to build a smaller boarding unit. It has too much of an overhead cost.

Mr. JENSEN. And the disadvantages are so great that you can't build a one-room schoolhouse on the Navajo Reservation because it wouldn't be feasible.

STEEL SCHOOLHOUSES

Mr. GREENWOOD. No; we wouldn't say it isn't feasible. As a matter of fact, we expect to do some exploratory work in connection with the erection of steel-panel schoolrooms.

Mr. JENSEN. I hope you get that out of your head awfully quick.

Mr. GREENWOOD. Well, we are exploring it. I didn't say that we were going to build.

Mr. JENSEN. Don't ever put schoolchildren in steel construction.

Mr. GREENWOOD. The only advantages we can see offhand—we haven't explored it much, it has only recently been brought to our attention—are that such schools might be portable and less costly.

Mr. JENSEN. You can build portable frame construction a lot cheaper than you can build steel, and it is much warmer in the wintertime and much cooler in the summertime. Steel construction in that climate down there would be terrible. You can use steel roofs but certainly not otherwise. I know a little bit about the lumber business and the building game. I was in it for 24 years. I certainly would never recommend steel construction for the schoolhouses. That would be the last kind of material I would recommend. Whether the steel industry would like it or not, I am going to leave it in the record. They told us a few years ago that steel grain bins were better

than wood bins, and I said the wood bins were better than the steel bins, and now they are finding it out to the expense of the taxpayers of America at a cost of millions and millions of dollars. Steel sweats and rots the grain inside. The wood keeps the grain in much better condition. It doesn't sweat. A steel building down in that climate would be hot as blazes in the summertime. You would have to insulate it on the inside, which would cost no end of money, and in the wintertime it would be cold, so let's not make that mistake.

Mr. GREENWOOD. We won't build any of them unless we are satisfied.

Mr. JENSEN. Well, I am not appropriating any money, as far as I am concerned, to build steel houses, because I think I am in a position to know something about what kind of construction is good and what kind is bad to live in, as well as to store grain in. Do you remember that outfit that we subsidized to the tune of millions of dollars that was going to build portable steel homes?

Mr. FLORY. Lustron.

Mr. JENSEN. Lustron. I stood on the floor of the House when that was recommended. I said, "Now, we don't want to put any human beings in a steel box or a birdcage." I said, "They won't sell."

Anybody that had a little sense and a little knowledge about home construction knew that that would be a complete flop, and it was, and it cost the American taxpayers plenty of money for that experiment. Now, if that isn't enough to stop you folks from building tin cans and birdcages for the Navajo children to live in, then I will say somebody is awfully dumb down there in that department.

I am going to try to see to it that you don't make that mistake by simply saying to you that, as far as I am concerned, we don't appropriate a dollar for that kind of stuff for our Navaho children to go to school in, because we have plenty of other materials that are fine to live in.

Mr. GREENWOOD. We were just trying to find a more economical way of providing school facilities.

Mr. JENSEN. That would be the most expensive way. Not only that, but the lightning and winds down there would turn them upside down. They would be tumbling around like tumbleweed with the children in them. It would be a terrible thing to build them for schoolchildren to live in.

Mr. NORRELL. Isn't it the Navajo Indians who move around and don't stay put in one location very long?

Mr. JENSEN. Yes.

Mr. NORRELL. I wonder what became of that radio program they had for children years ago. It was a program over the radio devoted to some subject like arithmetic. A few of the Navajo children out in the woods with a radio could hear it.

Mr. JENSEN. I almost had forgotten it.

Mr. NORRELL. But you remember it?

Mr. JENSEN. I certainly do.

Mr. NORRELL. Do you still have that?

Mrs. THOMPSON. I didn't know that there was a radio program for teaching. I knew there was a radio program on the Navajo Reservation at one time for disseminating information to the Navajo people at different points on the reservation, but I never heard it was used for teaching.

Mr. GREENWOOD. We do have a radio system on the Navajo which has proved to be valuable in facilitating the administration of the various programs.

Mr. NORRELL. I don't mean to criticize the program. I can see the value in certain circumstances.

Mr. GREENWOOD. Mr. Chairman, I can assure you we don't have a dollar in the 1954 estimate for construction of steel buildings.

Mr. JENSEN. I am glad to hear that, because if you did I certainly would try my best to see to it that you didn't get a dollar for it.

DISPOSITION OF BUILDINGS

Mr. BUDGE. Mr. Greenwood, in line with what the chairman was saying a few minutes ago about the hospitals that have been closed, what have you done with the buildings and equipment that was in all these schools and hospitals on the reservations that have been closed?

Mr. GREENWOOD. In many cases, Mr. Budge, we have issued permits to the public-school districts to utilize the buildings and equipment. In other words, where we have discontinued the operation of the school as a Federal school and have converted it to public-school operation, we have issued a permit to the public-school district to continue the use of that facility.

Mr. BUDGE. When the chairman asked that you put that figure in the record, I don't recall whether he made that broad enough to include the schools as well as the hospitals. I wish you would include school buildings and other types of buildings the Bureau has that are not being used on which the Government is still paying money.

Mr. GREENWOOD. Yes. However, the Bureau is not expending maintenance funds on buildings not used by the Bureau.

PIPESTONE SCHOOL IN MINNESOTA

Mr. JENSEN. While we are on Indian schools, what about the Minnesota schools? What about Pipestone?

Mr. GREENWOOD. The Pipestone School we expect to close at the end of this fiscal year.

Mr. JENSEN. Why?

Mr. GREENWOOD. Because we feel that the children can be accommodated in public schools, even though that means that some of them will have to go into foster homes in the areas where public-school facilities are available.

Mr. JENSEN. How far from Pipestone are you planning to build comparable facilities?

Mr. GREENWOOD. We are not planning to build any facilities at all. Except for Pipestone School we are out of the school business in Minnesota entirely. Pipestone is the only school that the Bureau is operating in Minnesota. All other children are attending public schools. We have a contract with the State of Minnesota under which we provide some aid to the public schools which Indian children are attending.

Mr. JENSEN. If you discontinue that school, what do you propose to do with those fine facilities that are there now?

Mr. GREENWOOD. Well, the State has indicated some interest in taking them over.

Mr. JENSEN. At what kind of a price?

Mr. GREENWOOD. We haven't gotten to the price stage yet.

Mr. JENSEN. I presume it would cost several million dollars to build such facilities today?

Mr. GREENWOOD. It would today, indeed.

Mr. JENSEN. Who will have the authority to sell those?

Mr. GREENWOOD. We will declare them surplus when we discontinue the school to the General Services Administration and they will have the authority under the Federal Propety Act to dispose of the facilities.

Mr. JENSEN. How many children are in that school now?

Mrs. THOMPSON. The last report I had was 29.

Mr. JENSEN. The rest of the children are being taken care of in public schools?

Mr. GREENWOOD. We have had an arrangement with the State this year under which they screened all children that applied for admission to the Pipestone School with a view of the State arranging for foster homes wherever foster homes were necessary. That accounts for the fact that we have such a small number in the school at the present time and those will be placed in foster homes where that is necessary and before the end of the fiscal year.

Mr. JENSEN. What is it costing the taxpayers to place these children in the foster homes?

Mr. GREENWOOD. The rate varies.

Mr. JENSEN. Now, these children that go into foster homes are sent to the public schools?

Mr. GREENWOOD. That is right. The average cost is $56.24 a month for children placed in foster and boarding homes.

Mr. JENSEN. How many do you have?

Mr. GREENWOOD. We have money for 620.

Mr. JENSEN. 620 at the rate of $56.24 a month gives you a cost of $674.88 a year.

Mr. GREENWOOD. That is less than it costs to keep them in the boarding schools.

Mr. JENSEN. It is?

Mr. GREENWOOD. Yes, sir. Our average cost for boarding schools runs about $830 per child per year.

Mr. JENSEN. How long are you going to keep paying these foster parents to take care of the children?

Mr. GREENWOOD. Only so long as they need foster homes and that atmosphere.

Mr. JENSEN. Then what happens?

Mr. GREENWOOD. Well, they are out on their own.

Mr. JENSEN. How long do you estimate that time will be?

Mr. GREENWOOD. It depends on the age of the child, of course.

Mr. JENSEN. That is what I mean.

Mr. GREENWOOD. I would hesitate to hazard a guess, because the ages vary so.

Mr. JENSEN. Well, from the time a child starts to school until he is through high school will be around 12 years.

Mr. GREENWOOD. Probably. That would be the maximum. Many of these children are older.

We find it exceedingly difficult, even though we are willing to pay, to find foster homes.

Mr. JENSEN. Well, is this foster-home program proving to be successful?

Mr. GREENWOOD. Yes, it is. We hope ultimately we might be able to get out of the boarding-school business through that means and get the Indian children to attend public schools.

GENERAL ADMINISTRATIVE EXPENSES

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$3,525,647	$3,525,647	$4,400,000
Reimbursements from non-Federal sources	5,320	4,800	4,300
Reimbursements from other accounts	9,999		
Total available for obligation	3,540,966	3,530,447	4,404,300
Unobligated balance, estimated savings	−41,327		
Obligations incurred	3,499,639	3,530,447	4,404,300

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
1. Departmental office	$761,992	$800,000	$860,000
2. Field offices	2,722,328	2,725,647	3,540,000
Total obligations from appropriated funds	3,484,320	3,525,647	4,400,000
Reimbursements from non-Federal sources:			
3. Replacement of personal property sold	5,320	4,800	4,300
Total direct obligations	3,489,640	3,530,447	4,404,300
Obligations Payable Out of Reimbursements From Other Accounts			
1. Departmental office	1,207		
2. Field offices	8,792		
Total obligations payable out of reimbursements from other accounts	9,999		
Obligations incurred	3,499,639	3,530,447	4,404,300

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	735	664	891
Full-time equivalent of all other positions	5	2	
Average number of all employees	643	636	830
Average salaries and grades:			
General schedule grades:			
Average salary	$4,495	$4,457	$4,534
Average grade	GS-6.4	GS-6.5	GS-6.6
Direct Obligations			
Appropriated funds:			
01 Personal services:			
Permanent positions	$2,872,560	$3,005,122	$3,864,090
Part-time and temporary positions	15,554	5,370	
Regular pay in excess of 52-week base	11,048	11,558	14,943
Payment above basic rates	49,137	52,550	68,654
Total personal services	2,948,308	3,074,600	3,947,687
02 Travel	119,545	144,500	156,000
03 Transportation of things	13,428	16,000	16,000
04 Communication services	79,932	83,295	84,134
05 Rents and utility services	52,660	44,037	44,037
06 Printing and reproduction	13,863	15,933	15,933
07 Other contractual services	93,913	94,008	94,008
08 Supplies and materials	148,913	78,314	78,314
09 Equipment	64,618	35,400	35,400
11 Grants, subsidies, and contributions	300		
15 Taxes and assessments	1,501	1,165	1,487
Subtotal	3,536,990	3,587,252	4,473,000
Deduct charges for quarters and subsistence	52,670	61,605	73,000
Total obligations from apropriated funds	3,484,320	3,525,647	4,400,000
Reimbursements from non-Federal sources:			
09 Equipment	5,320	4,800	4,300
Total direct obligations	3,489,640	3,530,447	4,404,300
Obligations Payable Out of Reimbursements From Other Accounts			
08 Supplies and materials	9,999		
Obligations incurred	3,499,639	3,530,447	4,404,300

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$393,139	$320,370	$308,017
Obligations incurred during the year	3,499,639	3,530,447	4,404,300
	3,892,778	3,850,817	4,712,317
Deduct:			
Reimbursable obligations	15,319	4,800	4,300
Adjustment in obligations of prior years	29,226		
Unliquidated obligations, end of year	320,370	308,017	308,017
Total expenditures	3,527,863	3,538,000	4,400,000
Expenditures are distributed as follows:			
Out of current authorizations	3,164,513	3,234,200	4,120,000
Out of prior authorizations	363,350	303,800	280,000

BUDGET REVISION

Mr. JENSEN. All right. Now, we will turn to "General administration expenses, departmental." I note you ask for $60,000 more than you had last year, for a total of $860,000. That must be for the Washington office. Is that right?

Mr. GREENWOOD. That is correct.

Mr. JENSEN. For the field, $3,540,000, which is $814,353 more than Congress allowed for fiscal year 1953.

Why all that?

Mr. GREENWOOD. The original estimate was $4,400,000, and that has been reduced by $650,000 to provide a total of $3,750,000.

REVOLVING FUND FOR LOANS

Mr. JENSEN. "Revolving fund for loans, Bureau of Indian Affairs." That is the same as it had been—$1 million.

Mr. GREENWOOD. That has been revised to eliminate the million dollars.

Mr. JENSEN. To eliminate the $1 million?

Mr. GREENWOOD. Yes, sir.

Mr. JENSEN. Now, I had planned to go into all of these many field offices and to try to find out if it were not possible to eliminate a lot of the offices in every department of the Bureau of Indian Affairs out in the field. I think, however, we shall wait to go into that at some later date, possibly. I hardly believe that you are in a position to make any recommendations, Mr. Greenwood. Am I right in that?

Mr. GREENWOOD. That is correct.

REDUCTION IN CONSTRUCTION PROGRAM

Mr. BUDGE. Mr. Chairman, I wonder if we could have Mr. Greenwood send the members of this committee a statement showing where this $5 million is to be absorbed which we were told was to be taken out of your request for construction funds.

Mr. GREENWOOD. We have not yet made a distribution of the $5 million reduction. I can say, however, that the major part will have to be assessed against the funds in the estimate for the Navajo program because that is where the largest amount of money is.

Mr. BUDGE. I would like to know where it goes with regard to different items. So, if you will be kind enough to send that to us after you have figured it out, we would appreciate it.

Mr. JENSEN. Is there anything else you would like to say, Mr. Greenwood?

TRANSFER OF FUNDS FOR SCHOOL CONSTRUCTION IN ALASKA

Mr. GREENWOOD. Mr. Chairman, there is one item I would like to mention. It does not involve the appropriation of any new money. About 3 years ago there was appropriated approximately $900,000 for the rebuilding of the White Mountain Boarding School in Alaska. We designed the facilities and advertised for bids. The bids came in far in excess of the available appropriation. The lowest bid was more than twice the amount of the available appropriation. So we began exploring ways and means of meeting the stiuation within the money that we had. We finally decided that it would be unwise to rebuild the White Mountain Boarding School as such; the rebuilding contemplated some expansion of the boarding facilities. We concluded that a better use of the money would be to construct day-school facilities in the areas from which the children attending the White Mountain Boarding School are drawn, and to provide some additional

facilities at Wrangell Institute. Through that program we would effect a savings of a considerable amount of money per year in the cost of operating the White Mountain Boarding School on an expanded basis.

We have submitted, for the committee's consideration, an explanation in detail of the revised program. The money would still be used to provide school facilities which was the original purpose of the appropriation, but not in the way or at the location that was contemplated at the time the appropriation was made. I would ask for your consideration of that proposal. That involves the money already appropriated. No new money is involved. We are satisfied it will result in an annual savings to the United States over the original proposal.

Mr. JENSEN. Now, Mr. Greenwood, if there is anything you would like to add when you go over your transcript which you feel would be information the committee should have, don't hesitate to write it in. That also goes for the rest of you folks, because the only way this committee can appropriate intelligently is to have all the information it can get on which to base its actions. We always try to do the right thing. We don't want to spend money that we shouldn't spend. We don't want to spend money for something in your bureau or any other department of the Government that there is no necessity for. We do know, however, as everybody does that knows anything about the Indian problem, that we have great responsibilities to our first Americans. We want to treat them and we want Uncle Sam to treat them in a manner in which they deserve to be treated, without wasting any of the taxpayers' money. It is our responsibility to do that thing which is right and proper for all Indian peoples.

ROAD CONSTRUCTION

Mr. GREENWOOD. There is one other remark I would like to make in connection with the money that we have in the estimate for road construction. We are directing the expenditure of that money to roads that can be brought up to standard and turned over to local governments for future maintenance. We are making considerable progress this fiscal year in that direction. By the end of the year we will have brought up to standard for turning over to States and counties for future maintenance approximately 370 miles of road.

That is our aim from here on out—to concentrate on bringing up to standard roads that can be turned over to local governments, either State or county, to maintain without expense to the Bureau.

Mr. JENSEN. When we get through the building of the road then we will be through with any expense of any kind, shape, or form with respect to the maintenance.

Mr. GREENWOOD. That is correct. Of course, there are certain areas where there isn't any local government to turn them over to. We have to maintain them in that case. Wherever a local organization exists, we are trying to make an arrangement whereby we bring roads up to standard and then turn them over to the local organization for future maintenance.

30433—53—pt. 2——31

Tribal Funds

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$30,116,369	$25,000,000	$25,000,000
Prior year balance available	79,915,416	83,783,288	88,747,083
Reimbursements from non-Federal sources	1,545	1,500	3,100
Reimbursements from other accounts	245,163	220,000	220,000
Total available for obligation	110,278,493	109,004,788	113,970,183
Balance available in subsequent year	−83,783,288	−88,747,083	−92,562,968
Obligations incurred	26,495,205	20,257,705	21,407,215

Note.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
1. Permanent authorizations:			
(a) Payment to Indian tribes	$18,868,129	$8,718,702	$10,274,525
(b) Miscellaneous tribal activities	5,392,603	8,480,979	7,549,037
2. Annual authorizations:			
(a) Health, education, and welfare services	635,072	745,396	796,412
(b) Resources management	601,932	721,967	874,134
(c) Construction and land acquisition	114,780	711,280	240,000
(d) General tribal affairs	663,237	741,357	1,129,454
3. Indefinite authorizations:			
(a) Tribal credit fund	217,907	136,524	540,553
4. Reimbursements from non-Federal sources:			
(a) Replacement of personal property sold	1,545	1,500	3,100
Obligations incurred	26,495,205	20,257,705	21,407,215

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	256	274	280
Full-time equivalent of all other positions	724	725	728
Average number of all employees	970	985	996
Average salaries and grades:			
General schedule grade:			
Average salary	$3,946	$4,013	$4,082
Average grade	GS–5.1	GS–5.1	GS–5.2
Crafts, protective, and custodial grades:			
Average salary	$3,412	$3,438	$3,528
Average grade	CPC–5.4	CPC–5.3	CPC–5.3
Ungraded positions: Average salary	$2,595	$3,753	$3,378
01 Personal services:			
Permanent positions	$925,626	$1,012,127	$1,054,599
Part-time and temporary positions	1,734,445	1,734,533	1,717,511
Regular pay in excess of 52-week base	4,225	4,338	4,850
Payment above basic rates	10,154	11,837	12,315
Total personal services	2,674,450	2,762,835	2,789,275
02 Travel	104,252	110,252	113,245
03 Transportation of things	17,452	18,795	19,275
04 Communication services	9,820	9,875	9,760
05 Rents and utility services	32,451	34,700	37,000
06 Printing and reproduction	2,950	2,500	3,100
07 Other contractual services	970,154	892,100	998,420
08 Supplies and materials	995,400	997,130	1,115,740
09 Equipment	104,015	76,000	79,100
10 Lands and structures	433,413	196,500	185,400
11 Grants, subsidies, and contributions	1,261,910	1,271,343	1,292,275
12 Pensions, annuities, and insurance claims	18,727,929	12,540,800	13,350,000
16 Investments and loans	1,175,309	1,380,250	1,450,000
Subtotal	26,529,505	20,292,080	21,442,590
Deduct charges for quarters and subsistence	34,300	35,375	35,375
Obligations incurred	26,495,205	20,257,705	21,407,215

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$489,310	$644,246	$550,451
Obligations incurred during the year	26,495,205	20,257,705	21,407,215
Total	26,984,515	20,903,951	21,957,666
Deduct:			
Reimbursable obligations	246,708	221,500	223,100
Unliquidated obligations, end of year	644,246	550,451	550,566
Total expenditures	26,093,561	20,130,000	21,184,000

Mr. JENSEN. With respect to the tribal funds request, we will insert page 142 of the justification into the record.

(The matter referred to follows:)

Indian tribal funds

Annual authorization, 1953	$2,920,000
Budget estimate, 1954	3,040,000

No part of the funds contained in this estimate represents a charge upon the Federal Treasury. This item reflects the disbursement of funds to the credit of Indian tribes or bands under numerous special acts of Congress in compliance with the terms of the various trusts and for carrying out tribal programs recommended by the tribal governing bodies with the approval of the Commissioner of Indian Affairs.

The budget schedule reflects, under the permanent authorization, disbursements from the tribal trust funds authorized by permanent legislation and, under the annual and indefinite authorizations, amounts requested annually by the various tribes for carrying out various tribal activities.

The estimate, therefore, is restricted to the funds requested annually as required by section 27 of the act of May 18, 1916 (39 Stat., p. 158).

All amounts in the estimate have been requested properly by the Indians except the sum of $500,000 for miscellaneous tribes, which is required to provide for additional resolutions that can be anticipated during the fiscal year.

THURSDAY, APRIL 2, 1953.

ADMINISTRATION, DEPARTMENT OF THE INTERIOR

WITNESSES

CLARENCE A. DAVIS, SOLICITOR
D. OTIS BEASLEY, ADMINISTRATIVE ASSISTANT SECRETARY
SIDNEY D. LARSON, DIRECTOR, DIVISION OF BUDGET AND FINANCE
DALE L. ROTHROCK, CHIEF, FISCAL DIVISION

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate	$2,290,911	$2,525,000	$2,660,000
Reimbursements from non-Federal sources	1,235	200	500
Reimbursements from other accounts	32,213	25,000	25,000
Total available for obligation	2,324,359	2,550,200	2,685,500
Unobligated balance, estimated savings	−57,833		
Obligations incurred	2,266,526	2,550,200	2,685,500

NOTE.—Reimbursements from non-Federal sources above are from the proceeds of sale of personal property (40 U. S. C. 481 (c)).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
Appropriated funds:			
1. Departmental direction	$265,170	$271,424	$273,924
2. Program direction and coordination	680,420	903,250	972,000
3. Administrative management services	899,832	928,193	978,523
4. Legal services	302,497	325,847	339,267
5. General services	85,159	96,286	96,286
Total obligations from appropriated funds	2,233,078	2,525,000	2,660,000
Reimbursements from non-Federal sources:			
6. Replacement of personal property sold	1,235	200	500
Total direct obligations	2,234,313	2,525,200	2,660,500
Obligations Payable Out of Reimbursements From Other Accounts			
1. Departmental direction	9,631	5,000	5,000
2. Program direction and coordination	5,515	7,000	7,000
3. Administrative management services	15,728	12,000	12,000
4. Legal services	898	1,000	1,000
5. General services	441		
Total obligations payable out of reimbursements from other accounts	32,213	25,000	25,000
Obligations incurred	2,266,526	2,550,200	2,685,500

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions	360	376	394
Full-time equivalent of all other positions	8	4	3
Average number of all employees	327	365	380
Average salaries and grades:			
General schedule grades:			
Average salary	$6,090	$6,231	$6,265
Average grade	GS–8.9	GS–9.1	GS–9.1
Crafts, protective, and custodial grades:			
Average salary	$3,017	$3,059	$3,092
Average grade	GS–3.5	GS–3.4	GS–3.4
Personal service obligations:			
Permanent positions	$1,923,794	$2,222,889	$2,341,418
Part-time and temporary positions	58,165	43,500	28,500
Regular pay in excess of 52-week base	6,227	7,403	7,864
Payment above basic rates	7,438	8,575	11,505
Payment to other agencies for reimbursable details	18,797		
Total personal service obligations	2,014,421	2,282,367	2,389,287
Direct Obligations			
Appropriated funds:			
01 Personal services	1,986,504	2,258,367	2,365,287
02 Travel	87,788	104,106	116,236
03 Transportation of things	574	634	634
04 Communication services	32,127	33,761	33,761
05 Rents and utility services	3,427	2,400	2,400
06 Printing and reproduction	49,593	58,597	70,907
07 Other contractual services	13,050	13,195	13,195
Services performed by other agencies	24,331	25,000	27,000
08 Supplies and materials	18,108	17,243	17,383
09 Equipment	15,724	10,215	11,715
15 Taxes and assessments	1,852	1,482	1,482
Total obligations from appropriated funds	2,233,078	2,525,000	2,660,000
Reimbursements from non-Federal sources:			
09 Equipment	1,235	200	500
Total direct obligations	2,234,313	2,525,200	2,660,500

Obligations by objects—Continued

Object classification	1952 actual	1953 estimate	1954 estimate
Obligations Payable Out of Reimbursements From Other Accounts			
01 Personal services	$27,917	$24,000	$24,000
02 Travel	757		
04 Communication services	326		
06 Printing and reproduction	1,103	1,000	1,000
08 Supplies and materials	2,110		
Total obligations payable out of reimbursements from other accounts	32,213	25,000	25,000
Obligations incurred	2,266,526	2,550,200	2,685,500

Analysis of expenditures

	1952 actual	1953 estimate	1954 estimate
Unliquidated obligations, start of year	$239,944	$213,691	$238,691
Adjustment in obligations of prior years	24,979		
Obligations incurred during the year	2,266,526	2,550,200	2,685,500
	2,531,449	2,763,891	2,924,191
Deduct:			
Reimbursable obligations	33,448	25,200	25,500
Unliquidated obligations, end of year	213,691	238,691	298,691
Total expenditures	2,284,310	2,500,000	2,600,000
Expenditures are distributed as follows:			
Out of current authorizations	2,044,848	2,300,000	2,400,000
Out of prior authorizations	239,462	200,000	200,000

Solicitor's Office

Mr. Jensen. We are pleased to have before the committee at this time Mr. Clarence A. Davis, Solicitor for the Department of Interior. Mr. Davis, how long have you been with the Department?

Mr. Davis. About 5 weeks, I think.

Mr. Jensen. About 5 weeks. I asked you that question because, even though I know you have learned a lot about the Department in those 5 weeks, there are a number of phases which pertain to your duties in the Department which you are not completely and fully advised on at this time, I am sure. It would be impossible for anyone to be able to be completely informed on all of the ramifications of the Department of Interior, so far as the Solicitor's Office is concerned, in that short period of time. The committee is pleased to have you here, and we would be happy to have you give us the benefit of anything you might have on your mind, which you would like to discuss with the committee.

CENTRALIZED CONTROL OF LEGAL PERSONNEL

I note in fiscal 1953 Congress appropriated $325,847 for the legal services in the Interior Department, and the same amount is included in the 1954 budget for legal services in the Department of Interior.

There is one matter which I would like to discuss with you, Mr. Davis, to learn whether or not you feel the customary practice in the

Department has been proper. I remember back a number of years ago when Mastin White, your predecessor, appeared before this committee and we asked him questions at quite some length pertaining to his duties. At that time Mr. White testified that while there was in the neighborhood, as I remember it, of 100 or so attorneys in the Department of Interior, only 6 of them were responsible to him. The balance of them, who worked on many phases of the Department, such as in the Bureau of Reclamation and other places, were not responsible to Mr. White.

Members of the committee were quite disturbed over that fact. We had high regard for Mastin White, and we thought he was a conscientious man and an able man who was trying to do a good job, but we knew it was impossible for him to do the kind of job that he should do and that he was able to do, since only six attorneys in the Department were responsible to him. So that year we wrote in the report that henceforth all of the attorneys in the Department would be under his guidance and authority.

Now I should like to have you address yourself to that matter, if you feel capable of doing so at this time, and tell us whether or not you, as Solicitor of the entire Department of Interior, think these attorneys should be under your jurisdiction or should not be under your jurisdiction. We would be glad to have any statement you wish to make on that subject.

Mr. DAVIS. Well, of course, it is obviously premature to express any final judgment on the matter, because I have not had time to even start to get into the inner workings of the legal staff either in the Solicitor's Office or the separate staffs of the bureaus. But, as a preliminary statement, I will tell you that I would not think of sitting up there in the Solicitor's Office if I did not have control of all the legal matters of the Department.

In the first place, the Federal code says in so many words I should have such control. It says the Solicitor shall be in charge of all the lawwork of the Interior Department.

It has always seemed to me from the outside, looking into the Department—and I have done a little bit of that—that a good many of the bureaus were simply completely independent of everybody.

Now, I had an identical experience many, many years ago when I went into the Nebraska Statehouse as attorney general. Every official in the statehouse had his pet lawyer parked in his department. Of course, what inevitably happens in those cases is that the lawyer, sooner or later, depending on how much individuality he has, becomes a yes-man to the bureau chief. He gets completely saturated with the ideas and the aims of the bureau, and he stretches every statute and decision he can to go along with them.

In other words, I have always felt that under such circumstances administrators very frequently did not actually get truly independent legal advice. So, in the Nebraska Statehouse I induced our legislature, without a bit of trouble, to simply abolish all of those scattered legal positions. We put all the lawyers on the attorney general's staff. We ended up with 11 on the attorney general's staff, as against probably 15 or 16 scattered around the departments, and we had a unified law department.

They were then all in one place, which probably is not practical here. We also got the benefit of an interchange of ideas among all the lawyers, instead of having them parked off by themselves in separate departments, coming to independent conclusions and without clearance with other lawyers, and they then had all of the benefits lawyers get out of discussing their opinions with other lawyers. By this method you get rid, by and large, of the domination of the administrative head over the legal staff or the administrator leading them, I think, sometimes quite a ways offshore.

Again, I have not been deeply into this at all; but, from what little I have seen of it, a good many of the bureau staffs—or shall we say some, at least—are rather inclined to simply go directly to the Secretary, bypassing the Solicitor's Office. Personally, I think that is very bad organization. In the second place, I think it makes for very bad law.

I think all of the basic opinions ought to clear—by that, of course, I do not mean every single opinion—with the Solicitor. All of the basic things I think ought to clear through the Solicitor's staff. Then you have a place to put your finger if you find something wrong. Otherwise, you cannot fix responsibility.

LEGAL WORK IN CONNECTION WITH LAND LEASE AND DISPOSAL ACTIVITIES

Mr. JENSEN. Let me ask you this question: We have, of course, a number of adjudicators, so to speak, who adjudicate leases on public lands.

Mr. DAVIS. Yes, sir.

Mr. JENSEN. Those people are not considered as attorneys, so to speak. However, they may have law degrees; some of them do and some of them do not. Actually they are employed as adjudicators. As such they do not receive their pay from this item for the Solicitor's Office.

Mr. DAVIS. That I understand is correct.

Mr. JENSEN. Since the adjudication of these leases in many instances requires people with law experience, in the event that they come across a problem on which they should have legal advice then they are supposed to bring it to the attention of the Solicitor's office, as I understand it. Is that right, Mr. Davis? If you cannot answer that, perhaps Mr. Beasley can.

Mr. DAVIS. I do not know.

Mr. BEASLEY. That is the way it has been done.

Mr. JENSEN. Yes. Well, the Bureau of Land Management was terribly behind on the adjudication of these leases here a few years ago.

I am happy to see that we have finally reorganized the department in such a way that they have caught up to some degree, according to the testimony, in the Bureau of Land Management. Now, of course, that is another matter which it might be well for the Solicitor's office to look into, because if those leases are not properly adjudicated there is an opportunity for claims against the Government in years to come.

I presume you have attorneys under your command who are constantly checking into those leases on the public domain. I think it is very important, because a lot of litigation could finally result unless they were properly handled.

NUMBER OF EMPLOYEES, 1954 BUDGET

How many attorneys can be employed and paid for with the money which you have requested for 1954, Mr. Davis; the $325,847?

Mr. DAVIS. That amount takes into account, just the present staff, which consists of 24 lawyers and I believe there is 1 vacancy. There were 2 or 3, or at least 1, already cut out. That is the basic staff of 24 lawyers.

Mr. JENSEN. In the original justifications we read the following:

> The workload record of the Office of the Solicitor for the fiscal year 1952 shows that a total of 10,549 items of work, exclusive of defense matters, was received. Based upon the records of past years, this high level of incoming business is indicative of a normal workload. In order to function in a reasonably adequate manner, therefore, a personnel complement of 27 legal professional employees (exclusive of the attorney to be assigned to the Interior Department Loyalty Board) and 27 other employees must be maintained, as a minimum.

That is the supporting help for these attorneys, such as stenographers and the like, I presume.

Mr. DAVIS. Yes.

Mr. JENSEN. This request for an additional attorney has been stricken, the Secretary tells me, Mr. Davis.

Mr. DAVIS. Yes, I knew that.

Mr. JENSEN. So far as you are able to evaluate it at the present time, do you feel that you need the 27 legal professional employees for your Department, as requested in the 1954 budget?

Mr. DAVIS. Well, yes, I think I do. Of course, certainly I do for awhile.

In other words, I have come in here, as you all know, perfectly strange to a completely strange staff, not a one of whom I had ever even met before I walked in the door. As you all know—and as I am sure you know, Mr. Jensen—it is almost impossible to appraise the workload which lawyers turn out.

Mr. JENSEN. Yes.

Mr. DAVIS. For example, here come up these land appeals. There are 243 pending now. However, 140 of them depend on 1 legal proposition which has not been settled yet. Now, there is a constant line of them. They come in with a file all the way from an inch to 2 or 3 inches thick, of miscellaneous documents, a large part of which is unsworn letters and all of that sort of thing. How anybody could gage, at least in the short time I have been there, whether we are getting an adequate production or not I do not know. I do not know how you could tell. I can take some of those files, and maybe I flatter myself, but I think in not over a couple of days I could exhaust that file and write an opinion and be done with it. On the other hand, may be I could not. I do not know.

I have to answer you that it seems to me that since the staff has been running this way and since they have not gained very much over where they stood a year ago, but are not any further behind—just about holding their own—we must assume that they are all necessary. What new faces might do I would not know, until we find out.

Mr. JENSEN. Yes. I am well aware of the fact that time will not and has not permitted the new Secretary or his help, which he now maintains, to go into all of these matters and to give us a complete

report on the needs so far as personnel is concerned, as well as other matters pertaining to the Department.

What the committee is trying to do, however, Mr. Davis, is to ascertain as best we can the requests in the budget which could either be eliminated entirely or reduced substantially, or reduced even in a minor degree.

Mr. DAVIS. That is right.

Mr. JENSEN. Because naturally we do not want to appropriate any more money than is absolutely necessary. I know you would not want us to. It is going to take time to reorganize this great and important Department. We hope that in the interim between these hearings and the hearings next year more information will be obtained, and I am sure it can be obtained and will be submitted to this committee, on which we can make some even more substantial savings than we possibly can make at this time and be safe in doing it. We do not want to hurt any good activity of the Department of the Interior.

So it is going to take time. We recognize that fact.

Mr. Davis, the man on my left, Mr. Budge, and the man on my right, Mr. Norrell, are both very able attorneys in their own right, so they may have some questions to ask you which might be more to the point than the questions I would have, being a lumberman by profession.

Mr. DAVIS. I always can take refuge in ignorance in this kind of an inquiry, you know.

Mr. BUDGE. It seems to me the chairman can take care of himself on this question.

Mr. Davis, I was interested in your remark relative to the final consolidation in the Attorney General's office in Nebraska of the legal services for the various departments. It seems to me that the Department of the Interior has a parallel situation in that the Solicitor's office has a very limited number of personnel, but practically every one of the 26 agencies in the Department of the Interior has its own legal staff, and many of the subdivisions of the divisions have their own legal staffs.

I do not know whether the same program could be worked out with the same net results as you have described in Nebraska or not, but I am happy that you have had that experience so that you can evaluate what such a program would do and would not do.

It is a pleasure to know you are with the Department, and I certainly want to wish you the best of luck in your new endeavor.

Mr. DAVIS. Thank you, sir.

BACKGROUND OF SOLICITOR

Mr. NORRELL. Mr. Chairman, I do have a question.

Mr. Davis, I believe this is the first time you have appeared before our committee, is it not?

Mr. DAVIS. Yes, it is.

Mr. NORRELL. I think, Mr. Chairman, if he would briefly outline his schooling and experience for the record here it would be very helpful to us and to the country.

Mr. JENSEN. That would be fine. That request is customary, Mr. Davis. This committee has always felt that it was right and proper

that anyone who had received as important an appointment as you have received should give the committee a brief history of his life. If you will do that at this time, at Mr. Norrell's request, we will appreciate it.

Mr. DAVIS. Yes. I am sorry I did not bring over the "obituary" which was prepared.

Mr. JENSEN. That is not necessary.

Mr. DAVIS. Well, gentlemen, I was born out in Nebraska at Beaver City, which is in southwestern Nebraska, right on the edge of the semiarid region, exactly 60 years ago.

I lived there until I finished high school. Then I went to Nebraska Wesleyan University in Lincoln, where I was graduated in 1913. From there I went on to Harvard Law School, where I graduated in 1916, and then I returned to Nebraska and 3 years later I was elected attorney general and went into the Nebraska statehouse.

I was in the statehouse for two terms, until 1923. After that I returned to Holdrege, which is also in southwestern Nebraska, where I practiced law for 12 years until 1936—a very general practice. Then I moved into Lincoln where I opened a law office. I have built up there quite a law firm for Lincoln. I now have 4 partners and a 7- or 8-man office there in Lincoln, engaged in a very general practice, from which I resigned when I came down here.

During these many years, in order that you may understand now and in the future my position on many of these matters, I should tell you that during my public service and as attorney general I became deeply enmeshed in the final obsequies of the Nebraska bank guaranty law and consequently, for several years after leaving the statehouse I was engaged in the problems which arose out of the financial collapse of that State guaranty law. In other words, there was litigation on a statewide scale, and a lot of it.

Then later I was employed in the electric utility field, and I was counsel to one of the private power companies out there for a great many years, until in 1940, when that power company was sold to a public agency of the State of Nebraska. As you know, all the power in Nebraska is entirely public power. There are no private power companies in the State. Immediately, when the company which I represented was purchased by the public agency, I was elected counsel of the public agency and I have been general counsel of the statewide public power agency for the last 12 years.

Therefore, I have had almost an equal number of years on both sides of the electric power issue, and I have looked at it both from the standpoint of the private investors for many years and from the standpoint of a public agency for many years. During that time, of course, I have had a great many contacts with the Bureau of Reclamation and the Missouri River problems, as they have come along, and with the Rocky Mountain region of the Bureau, because the companies I represented were doing business in Colorado and Wyoming as well as in Nebraska. So that part of the work is quite familiar to me. I know the field quite thoroughly.

That is about it, I guess.

LEGAL INTERPRETATIONS OF ACTS OF CONGRESS

Mr. NORRELL. Mr. Davis, I think with a man of your background we ought to have a very capable and conscientious Solicitor for the Interior Department. As a lawyer myself, may I say that it is a lawyer's duty—and I think with your background you will agree with me on this—that when he is representing a client in private practice, that client is entitled to the best effort possible on his behalf, in order to bring out what the evidence is and to have the law construed as favorably on his behalf as possible.

As I construe the duties of an attorney for the Government, such as you, anyone under you, or any other attorney who is in the Government service—and I am saying this in order to get your opinion—it is your job to determine what Congress meant and what the intent of Congress was and what Congress had in mind, when you construe an act of Congress. In other words, I think it should be approached with the idea in mind of determining what the law is and construing it as nearly as is proper to carrying out the intent of Congress. Am I right in that or not?

Mr. DAVIS. I thoroughly subscribe to that, sir.

Mr. NORRELL. I have been on this committee a long time, with the chairman here.

Mr. DAVIS. I know.

Mr. NORRELL. There have been times in the past when my ideas clashed with those of the legal staff of the Interior Department. I like them personally. I can argue with a man over a legal question and be his best personal friend. Lawyers learn how to do that. But they have at times attempted to construe the acts of Congress to suit their own philosophy and their own ideas of government. I do not believe that is right. I do not think you think so.

SIZE OF LEGAL STAFF

I am encouraged by your stand on these questions, and the fact that you are going to be Chief of the Department's legal staff. I know you cannot come in here a few weeks after you have taken office and recommend a substantial change in the staff. However, when I came on this committee they had a few attorneys down there, and I thought it was an adequate staff at that time. They probably would need a few more now. I think you are going to find that you do not need 27 members of the legal staff. I hope you will, anyway.

I do not expect you to make a recommendation now to cut it down, but I hope when the vacancies accrue that you will not be too hasty in filling them until you can determine just exactly what you do need. This committee wants to give you what you need.

Mr. Chairman, I believe, since he is standing on the 27 which they had last year, with no increase, that that is all.

Mr. JENSEN. Thank you.

Mr. DAVIS. Let me make an additional remark to clarify my position.

Mr. JENSEN. All right.

Mr. DAVIS. It probably is not very smart to sit here and volunteer theories, and I do not want to handicap myself with you gentlemen

next year, because I am not sure but I personally have a feeling that this law department is overstaffed. I have a feeling that it is quite heavily overstaffed. I am not too sure it is overstaffed in the Solicitor's office. I suspect it may be overstaffed in some of the bureaus.

I have visited three of the outlying bureaus in the last week or two. We have 4 less than we had at one place, and we will have 4 less in a couple of weeks.

I just do not want to get myself in the position of promising too much, but I have that feeling. I also have the feeling that in the interests of efficiency, and of some kind of unity within the law department, that these bureaus simply must be brought to the point where they clear through the Solicitor's office. Frankly, I will not stay there if they do not, because I will not be responsible for that kind of an office.

Mr. NORRELL. You are absolutely correct.

Mr. DAVIS. How you do this I am not too sure. Maybe you remove what are now called the chief counsels of the bureaus, and put them up in the Solicitor's office, and call them assistant solicitors in charge of such and such a field. At least then you have them where you could know what their thinking is and coordinate it with other bureaus and your own staff. I do not know just how you do this, but something like it will have to be done.

Mr. NORRELL. You will have to have time to work it out.

SALARIES

Mr. DAVIS. That is right. You need time, and, in addition to that, most important of all, you need people.

Mr. NORRELL. Yes, sir.

Mr. DAVIS. Who are willing to come in here at the salaries they are paid here, which are pretty meager from the standpoint of lawyers. I am bringing in 4 or 5 new people very shortly, but I want to tell you that it is pretty tough to bring them in here, if they have any experience at all, to a lot of these middle grade salaries of $7,000 or $8,000 a year, because they are just all doing better than that, and you have to get them for unusual reasons or by pleading with them that it is good for them to be down here a little while and find out something about government, or by making some special plea like that, which is the only way you can get them in here. It is not good.

Then I will tell you something else. This has disturbed me greatly. I would suppose that at least 95 percent of the business of the Interior Department is west of the Mississippi, and the law department is staffed predominantly with people from the eastern seaboard. I, frankly, do not think that is a healthy situation.

Mr. NORRELL. You have made a very good statement.

Mr. DAVIS. I have nothing more to say. I just was giving you some idea of the way my mind was working in regard to these matters.

Mr. NORRELL. I just want to add this to the statement I made awhile ago and in connection with your statement. As a Democratic member of this committee, I hate to say this, but there has been too much effort made in the past to try to misconstrue what the Congress does so that they can go on and do what they want to do in the executive branch of the Government.

The attorneys, and all of them, ought to take the position to determine what Congress was trying to do, and to sustain that, if at all possible, and I am glad to hear you say that you do agree on that point.

Mr. DAVIS. Well, there has been a great deal of criticism of the Department, as you well know, and you are seeing yourself a great deal of it, because of the fact that through regulations and interpretations, the Department has vastly exceeded both the authority given it and the wishes of the Congress.

So far as I am concerned, I have no ideology of any kind whatsoever to try to make effective. I have been a practicing lawyer for many years. I expect to be a practicing lawyer again, therefore, so far as I am concerned, whatever you write in the statute book is going to be what we are going to do.

Mr. NORRELL. That is very good.

Mr. JENSEN. All right, thank you, Mr. Davis for your appearance here today.

SECRETARY'S OFFICE

Mr. JENSEN. Mr. Otis Beasley will handle the Secretary's Office appropriation item. Mr. Beasley understands it very well. He has had many years of experience in the Department and I know that he can answer the questions. Mr. Larson, Director of the Budget and Finance Division is here, along with Mr. Rothrock, Chief of the Fiscal Section for the Secretary's Office. Between you three gentlemen we can expect the right answers, I am sure.

DEPARTMENTAL DIRECTION

The item for the Secretary's Office which appears in the 1954 budget is $2,525,000, and the first item under that is "Departmental direction," $271,424.

Mr. Beasley, will you tell us just how this money is spent and what the people do that get their pay out of this item, "Departmental direction"?

Mr. BEASLEY. Mr. Chairman, this item covers the salaries and expenses of the Secretary of the Interior, his immediate assistants and the clerical staff, and the Under Secretary and his immediate staff. It also includes the Division of Information which is attached directly to the Secretary's Office.

Mr. JENSEN. Yes. How many people are employed there?

Mr. BEASLEY. In the immediate Office of the Secretary there are 20 positions in the budget, 7 in the Office of the Under Secretary, and 7 in the Division of Information.

(Discussion off the record.)

ADMINISTRATIVE MANAGEMENT SERVICES

Mr. JENSEN. The next item is "Administrative Management Services," 928,193.

Mr. BEASLEY. Mr. Chairman, the Administrative Management Service covers all of the administrative management functions exercised by the Secretary. It includes my own office, the Division of Budget and Finance, the Division of Management Research, the Divi-

sion of Property Management, the Division of Personnel Management Division of Administrative Services, and there has recently been added the Division of Security.

Mr. JENSEN. What is the Division of Security?

Mr. BEASLEY. The Division of Security was established in November for the purpose of passing upon the security risks of the employees of the Department; second, to carry out a program for protection of the Department's facilities in case of attack; and, third, to carry out the civil-defense program of the Department.

Mr. JENSEN. All right, go ahead and explain the other activities that come under this.

Mr. BEASLEY. I think you are very familiar with the Division of Budget and Finance. It is one of the smallest organizations of its kind in any of the executive departments. There are only 23 positions in that Division. It also includes the Branch of Investigations, where all reported irregularities of the Department are thoroughly investigated. The Branch of Finance is primarily engaged in a cooperative project with the General Accounting Office to improve the accounting systems of the Department and to integrate the appropriations with the budget to see that the purposes of the appropriations are carried out.

The Branch of Budget works with the Bureau of the Budget and the Appropriations Committees of Congress.

LEGAL SERVICES

Mr. JENSEN. Now, the legal services. Mr. Davis, the Solicitor, testified regarding that item.

Mr. Beasley, is there anything you would like to add at this time to what Mr. Davis has said?

Mr. BEASLEY. No, sir, except that I know what he told you came from his experience that he has gained so far in the Department. I know that he feels that a great deal of change must be made in the legal services of the Department. How he would accomplish that, organizationally, he does not know as yet, but he has consulted with me as to how he can go about it.

Mr. JENSEN. Good.

GENERAL SERVICES

The item for general services is $96,286.

Mr. BEASLEY. Those are fixed charges that recur year after year and are the telephone services for the Office of the Secretary, telegrams, postage, laundry, and an item of $10,000 for legislative travel.

Mr. JENSEN. Let us clear that laundry item up for the record.

Mr. BEASLEY. That is for towels. The employees get one clean towel a week to wash their hands, and they are generally kept in their office.

Mr. JENSEN. They are kept in the office?

Mr. BEASLEY. Yes, sir. Most offices have a washbasin.

Mr. BUDGE. I note that in this request of $96,286, you say "included in these expenses are a number of things," the first item is printing and binding, and yet you have a separate item of $70,907 for fiscal year 1954 for printing and reproduction.

What other printing and reproduction is included in this item?

Mr. BEASLEY. What other printing and reproduction?

Mr. BUDGE. Yes, sir; that is not included under your general appropriation item for that purpose?

Mr. BEASLEY. Most of this printing and binding comes under general services activity, which includes $96,286.

Mr. BUDGE. How much of it is for printing and binding, and what kind of printing and binding is it?

Mr. BEASLEY. It includes more than printing and binding. It includes mimeographing, photostating, the justifications material that comes to the Congress, the special reports that are prepared.

Mr. BUDGE. I still do not see why it would not be in this regular appropriation item.

Mr. BEASLEY. I am not sure that I completely understand your question, Congressman Budge. I would like to have a meeting of minds on this item.

Mr. BUDGE. In your justifications, under obligations by objects, the request for 1954, you have an item for printing and reproduction of $70,907; and it seems to me that you are requesting funds in this item under general services for this same thing.

Mr. BEASLEY. It is reflected. The printing and binding is reflected under the general services. You are looking at the objective classification on page 207 of the committee print?

Mr. BUDGE. Yes.

Mr. BEASLEY. If you will turn to page 26 of the Department's distribution of expenses by organizational units and objective classification, you will see the printing and reproduction costs that are incurred under each of the organizational units.

Mr. BUDGE. This is not a duplication?

Mr. BEASLEY. It is not a duplication.

LANGUAGE CHANGES

WITNESS

D. OTIS BEASLEY, ADMINISTRATIVE ASSISTANT SECRETARY

Mr. JENSEN. We turn to language changes and recommendations for language changes.

In the past, and as it will no doubt be in the future on this committee, Mr. Norrell has had a great deal to do with handling these language changes, as you know, Mr. Beasley. I have, of course, been interested in them and have taken part.

Now, Mr. Budge, since you are an attorney, here is one place where you will have an opportunity to exercise your legal talents, and I shall expect you and Congressman Norrell to see to it that these language changes are for the good and not for the bad.

AUTOMOBILES AND AIRPLANES

Mr. BUDGE. Mr. Chairman, could I explore one other field briefly before we go into the language changes?

Mr. JENSEN. Yes.

Mr. BUDGE. I note that the Department of the Interior has at present 5,759 automobiles, and it contemplates the purchase of 1,138 new automobiles, on which it will trade in 935 present automobiles, which will mean adding the 5,759 which are used vehicles not to be traded in, plus the 1,138 new automobiles, a total of 6,897 automobiles;

Using the same computations, I find you are trading in 7 airplanes and getting 10 new ones to add to your present fleet of 57, which means the Department of the Interior will have 67 airplanes.

I am wondering if consideration is being given to cutting down vehicular and air transportation? That seems to me to be a terrific fleet for 1 department, almost 6,900 automobiles and 67 airplanes.

Mr. JENSEN. As we go through each section of this bill, you will find the number of new automobiles that are requested for every agency of the Interior Department, and the number of replacements that are requested. That also pertains to airplanes. As we go through these language changes and recommendations, we can question Mr. Beasley on the individual agencies as to the number of airplanes or automobiles they have, and then in marking up the bill, we will determine just how many we will allow, if any.

Mr. BUDGE. Mr. Chairman, we get quite a complete justification as to the reason for new automobiles, which only amounts to 203 over the replacements. So we do not have much of an area in which to work on the 203, and it seems to me the Department could eliminate some of the present automoblies.

Mr. NORRELL. At this point, Mr. Chairman, in order to assist our colleague some in going through these items of changes of language, the bill here contains the changes recommended by the old administration. I think Mr. Beasley should state each time whether the present administration recommended the changes, so that we will understand if it stands as it is in the bill or if you now recommend something else.

Mr. JENSEN. All right.

CONNALLY HOT OIL ACT

Mr. BEASLEY. The first language change is on page 3 of the committee print of the bill, "Enforcement of the Connally Hot Oil Act," and the change there would provide for the purchase of two passenger vehicles for replacement only. There is no increase proposed in the total automobiles for this purpose.

AUTOMOBILES

Mr. JENSEN. Please state the number of vehicles in each case. I would like to know the number of automobiles they have in each agency.

Mr. BUDGE. I would too, because maybe we could transfer them from one agency that has an excess to another agency that requires new ones.

Mr. JENSEN. Yes. The Interior Department can transfer between agencies the automobiles that they may have in excess in one agency and which they may need in other agencies. I could not imagine any place that would need funds to purchase a new automobile outright. I am sure the committee is not going to stop them from making some trade-ins, but to buy outright automobiles without an automobile to trade in, certainly I think we would be derelict in our duty if we allowed a new automobile for any department of the Government, knowing that, in the case of the Interior Department, they have right

now 6,877 automobiles. So I do not think you will have to tarry long on trying to justify new language in here that would permit the purchase of a new automobile, an outright purchase of a new automobile. Do you agree with that, Mr. Norrell?

Mr. NORRELL. I think so, unless there are some special cases that may be very good. Suppose we go through this and get the explanations, and then when we make our decision we can be governed by what the chairman has said.

Mr. BEASLEY. In connection with the enforcement of the Connally Hot Oil Act, they now have 15 cars and would purchase 2 for replacement purposes only. And I might call attention to the fact that at that rate of replacement the cars would be at least 6 years old when they were replaced.

SOUTHEASTERN POWER ADMINISTRATION

CONSTRUCTION

The next change is on page 5 of the committee print, Southeastern Power Administration, the change being the proposed deletion of language in the 1953 Appropriation Act that prohibited the use of prior appropriations for the construction of transmission lines and facilities unless certain conditions had been met.

Mr. NORRELL. Why do you want to delete it?

Mr. BEASLEY. Because the language has served its purpose and is no longer needed.

Mr. JENSEN. It has completely served its purpose?

Mr. BEASLEY. Yes.

Mr. JENSEN. I might say, Mr. Budge, when Mr. Beasley has made a statement like that, we have always found that it was exactly right.

Mr. NORRELL. I agree with the chairman on that. We can rely on the statements made by Mr. Beasley.

ADMINISTRATIVE PROVISIONS

Mr. BEASLEY. The next change is on page 11 of the committee print, administrative provisions of the Southeastern Power Administration, which relates to the proposed purchase of 20 passenger automobiles.

Mr. NORRELL. You are not recommending today that we allow 20?

Mr. BEASLEY. No. Under the revised budget there would be no new automobiles purchased. They now have 11 automobiles.

SOUTHWESTERN POWER ADMINISTRATION

CONSTRUCTION

The next change is on page 12 of the committee print, Southwestern Power Administration. The change proposed on that page is the deletion of the language relating to the amount of 1953 appropriation for the liquidation of obligations incurred pursuant to authority previously granted. That language is no longer needed, since the contractual authority has been completely liquidated.

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ADMINISTRATIVE PROVISIONS

The next change is on page 18, administrative provisions, Southwestern Power Administration. It proposes the purchase of nine passenger automobiles for replacement only.

Mr. NORRELL. Does that recommendation stand?

Mr. BEASLEY. That recommendation stands. They now have a total of 64 automobiles.

Mr. JENSEN. That is more than they need.

Mr. NORRELL. How can they use 64 plus 9?

Mr. BEASLEY. Nine would be for replacement only and would leave them a fleet of 64.

Mr. JENSEN. We are cutting out a lot of money in Southwestern Power Administration.

Mr. NORRELL. If they cannot continue to build transmission lines and all that, why do they need that large number of automobiles? What do they have to do in the way of travel except maintaining their lines?

Mr. BEASLEY. If you do feel they have too many, the deletion of the provision to replace nine would mean they would be reduced indirectly.

Mr. BUDGE. If it is found that 64 automobiles are not necessary for the Southwestern Power Administration—and I strongly suspect that is true—can you not transfer some of those automobiles to another agency in the Department?

Mr. BEASLEY. We could transfer them, but under the regulations I believe the agency to which they would be transferred would have to buy them from the agency disposing of the cars.

Mr. BUDGE. Why do we not do that? If they can get along with, say, 40 automobiles, we could pick up 24 for agencies that need them.

Mr. NORRELL. In other words, when we write the bill up, we should put in a statutory provision for a transfer.

Mr. BUDGE. That is what I would like to see.

Mr. JENSEN. We can give them permission to transfer property without a cash consideration. I think, though, that we have to limit that to transfers within the Interior Department, but we can authorize them to make such transfers from one agency to another within the Department.

Mr. NORRELL. That is right.

Mr. JENSEN. So that, if you do not need that many automobiles in the Southwestern Power Administration and you need them in some other agency, the transfer could be made. I think we had better do that.

FISH AND WILDLIFE SERVICE

Mr. BEASLEY. The next change appears on page 23 of the committee print and is a new item, "Fishery research." You have already had testimony on the purposes of this new item.

Mr. NORRELL. Is not this really reviving an item which some years ago was eliminated?

Mr. BEASLEY. No. This is an item for work that has not heretofore been performed by the Fish and Wildlife Service. It relates to a research program in the Northwest for devising ways and means of

facilitating the fish going upstream where dams have been constructed and to prevent injury to fish escaping downstream.

Mr. NORRELL. A biological study?

Mr. BEASLEY. Primarily biological research.

Mr. NORRELL. We have had criticism on the floor of the House for years and years about the biological studies of such things as fish and birds.

Mr. BEASLEY. I would like to state, in connection with this item, Congressman Norrell, that the Government is making heavy investments in facilities being constructed to get the fish up over the dams, and it is believed that through this type of research we can find ways and means of reducing those costly facilities.

Mr. JENSEN. May I say this: We have $70,000 in a research item in the Fish and Wildlife budget, which can be used for this very purpose, and I must say in all fairness that I see no logical reason why this item of $260,000, in addition to the $70,000 that the Fish and Wildlife Service has, should be included in this budget for the Secretary's Office. I just cannot see it. If the Secretary cannot depend on the Director of the Fish and Wildlife Service and his staff to investigate this matter and to bring such information to the attention of the Secretary and his staff, there is something wrong with the organizational setup, as I see it.

Mr. BEASLEY. The Office of the Secretary would not perform this research. It would turn this money over to the Fish and Wildlife Service, and they would use it the same as if appropriated directly to them.

Mr. JENSEN. All right.

Mr. BEASLEY. I want to say, in connection with this item, that there is a proposed authority to purchase two passenger motor vehicles. This is the first instance they are not for replacement purposes as this is a new item. The cars are to be used by aquatic biologists conducting field investigations and inspections in connection with research to determine the most satisfactory means of providing for passage of migratory fish over dams and to evaluate the efficiency of salmon hatcheries.

EMERGENCY FLOOD AND STORM REPAIRS

The next change is on page 24 of the committee print, which was for emergency flood and storm repairs. It is a nonrecurring appropriation, and the language would be deleted from the 1954 bill.

BONNEVILLE POWER ADMINISTRATION

CONSTRUCTION

The next change is on page 28 of the committee print, Bonneville Power Administration, and it deletes the language providing for a certain amount of the 1953 appropriation to be available only for the liquidation of obligations incurred pursuant to authority previously granted.

Mr. NORRELL. What does that do?

Mr. BEASLEY. The 1953 appropriation act was the last year in which there had been any contractual authority unappropriated for,

and inasmuch as all contract authority has been liquidated, it is no longer necessary to earmark that appropriation.

Mr. NORRELL. So that this is not necessary?

Mr. BEASLEY. That is correct.

ADMINISTRATIVE PROVISIONS

The next change is on page 35, "Administrative provisions, Bonneville Power Administration." The first change is the deletion of the words "including such services." That is unnecessary language, in the opinion of the Bureau of the Budget, inasmuch as it does not add to or detract from the authority otherwise provided for consultants.

Mr. NORRELL. Why was it put in there?

Mr. BEASLEY. It was inserted, I believe, through inadvertence on the part of the Bureau of the Budget or by the committee in modifying the language last year.

Mr. NORRELL. How did it change your operation as of the time we included it?

Mr. BEASLEY. It did not change it. If you will read the language beginning at line 3.

Mr. NORRELL. It did not add to or take from?

Mr. BEASLEY. No, sir.

The next change is on the same page, page 35, for the proposed purchase of 25 passenger vehicles, of which 11 shall be for replacement only.

Mr. JENSEN. How many automobiles does Bonneville have at the present time?

Mr. BEASLEY. Seventy-three.

Mr. JENSEN. And how many airplanes?

Mr. BEASLEY. Three airplanes and two helicopters.

I would like to insert in the record at this point statements in justification of the purchase of these automobiles and one helicopter.

(The matter referred to is as follows:)

AUTHORIZATION FOR PURCHASE OF PASSENGER-CARRYING VEHICLES

The fiscal year 1954 passenger-car program proposed purchase of 25 passenger cars, of which 11 shall be for replacement. This will bring total number of passenger cars up to 87 by the end of fiscal year 1954. The 14 additional passenger vehicles requested are necessary to provide suitable transportation facilities for the increased administrative, supervisory, and engineering personnel travel required by the growth of the system; to supplement the existing passenger-car pools at Portland and Spokane, and to establish such pools at each of the other three area headquarters (Northwest, Southwest, and Southeast). It will also provide passenger cars for four zone substation construction superintendents of the Branch of Construction who are now equipped with sedan deliveries. These employees have no need for the cargo-hauling characteristics of the assigned vehicles, but quite often find it necessary to transport four or more employees during emergencies or on supervisory or inspection trips with design engineers or others. The difference in cost is negligible and is more than offset by the greater passenger-carrying capabilities of the passenger cars.

During the past year, the Administration's passenger vehicles have been operated on an average of 15,408 miles per vehicle-year. This is in contrast to the national average of Government passenger vehicle usage of 10,775 miles per year. The high utilization of these vehicles by the Administration indicates the demand for transportation, which is constantly increasing with the growth of the system. This high usage is almost entirely field use. The Spokane car pool, for instance, which operates entirely for field use, averaged 2,622 miles per car for the month of July 1952, which represents extreme utilization. With the exception of the four cars mentioned for substitution of vehicles now used by construction personnel, all additions to this class of vehicles will be used by operation, maintenance, and administrative personnel.

AUTHORIZATION FOR PURCHASE OF AIRCRAFT

Funds are requested for the purchase of one helicopter in fiscal year 1954. This will give the Administration three helicopters for routine and emergency line patrol, as well as for reconnaissance in connection with the preliminary location of new lines.

Routine patrols are scheduled so that complete system coverage is obtained every 6 weeks. Due to the size of the system, this type of coverage requires that two ships be engaged in patrol work constantly. A third ship will be used as a spare when either of the others is being overhauled in accordance with CAA regulations. It will also be capable of transporting 3 workmen, in addition to the pilot, an increase of 1 person capacity over the presently owned helicopters. This increased carrying capacity will make it highly adaptable in transporting men to transmission line trouble, especially in the high mountain areas where snow would impede surface travel.

Mr. NORRELL. Off the record.

(Discussion off the record.)

Mr. BUDGE. Mr. Beasley, what is the purpose of the language in the bill now beginning with the words "the amount herein for the Bonneville Power Administration shall be available in one fund"? What is the purpose of that?

Mr. BEASLEY. To facilitate accounting and accounts with the Disbursing Office in the Treasury, and the General Accounting Office.

Mr. BUDGE. Does that, in effect, give the Bonneville Power Administration any more latitude in the purposes for which it uses the money than other agencies?

Mr. BEASLEY. No, sir; it does not, because the funds available in that one account state the amount appropriated for construction which can be used only for construction, and the amount appropriated for operation and maintenance can be used only for operation and maintenance.

Mr. BUDGE. Under that language, can funds which are justified by this committee for a particular construction item be used for some other construction item? That is pretty broad language.

Mr. BEASLEY. This language would not permit that any more than would be permitted if the language were not there. Of course, when you appropriate a lump sum for the Bonneville Power Administration, based on an itemization of the transmission facilities, legally they could take the funds appropriated for one facility and construct one not presented in the budget, but the controls that are established are such that they must spend the money for the facility which was included in the estimate and approved by Congress in making the appropriation. They cannot undertake the construction of a facility which has never been before the Congress. They could do it legally, but I expect that the administrative action would make it impossible for them to do it again.

Mr. BUDGE. Is there any reason, then, why this bill should not carry language which would prohibit and make illegal the expenditure of funds for purposes which have not been justified before the Congress?

Mr. BEASLEY. There would be nothing wrong with including such language if you feel the Department cannot be relied upon to carry out that intent.

When this appropriation structure was approved in 1951 the Secretary of the Interior at that time told the committee that he would see that the funds were applied exactly in accordance with the budget as modified by the Congress, and if Congress found any instance

where that was not being done he would encourage the committee to take such action as necessary to prohibit it.

Mr. BUDGE. I feel that the new Secretary would be wholeheartedly in agreement with that statement. For that reason it seems doubly safe to me for the appropriation bill itself to carry that language.

Mr. BEASLEY. There is one question that you would have to consider in connection with that language. It might be interpreted that you could not spend any more for a particular item that was approved in the budget than was justified, whereas changing conditions after an appropriation act is passed often necessitates some modification of the amounts. You may have an item of $100,000 for the construction of a facility, but the low bid may be $105,000.

Now, the interpretation of the language that you suggested could be such that the facility could not be constructed because there were not sufficient funds for that purpose; whereas, under the present arrangement, if you can effect a saving of $5,000 in some other facility you can go ahead and construct the one which is exceeding the cost which was presented to the Congress.

Mr. BUDGE. When your latitude there is 5 percent, that might be entirely justified; but, of course, there is nothing, as I understand it, which would prevent the same latitude if the percentage was 200 or 300 percent, and I do not feel that that should be permitted, and I also do not feel that any Department should be permitted to spend funds on programs which are not justified before this committee.

Mr. BEASLEY. I agree thoroughly with that statement, but I have not found from experience that there is any material deviation from the amounts that are justified in the budget estimates.

Mr. BUDGE. Would you consider that in the Department and see if you can come up with some language which this committee could consider in that regard?

Mr. BEASLEY. Yes; I would be glad to do so.

Mr. BUDGE. Thank you.

(NOTE.—The language was furnished to the committee.)

Mr. BEASLEY. While it is not indicated as a change, on page 35 there is authority left in the bill that would authorize the purchase of one aircraft, and according to the justifications that is for a helicopter.

The next change, which appears on page 36 of the bill, is a deletion of the language carried in the 1953 appropriation act, changing the salary of the Administrator of the Bonneville Power Administration.

Inasmuch as the language carried last year is in the nature of permanent legislation, its continuation in the appropriation act is not necessary.

Mr. JENSEN. All right.

BUREAU OF LAND MANAGEMENT

CONSTRUCTION

Mr. BEASLEY. The next change appears on page 43, "Construction, Bureau of Land Management."

The first change is in the language authorizing the acquisition or construction of buildings and appurtenant facilities in Alaska.

Inasmuch as the revised budget has deleted the funds in the estimate for buildings and facilities in Alaska, that language will not be necessary.

Mr. JENSEN. That is the language in italics?

Mr. BEASLEY. Yes, sir.

There is one other change in that page. It is in the last "provided" clause, and it is in italics, the word "of" following the word "that" in the provisio.

Mr. JENSEN. What line?

Mr. BEASLEY. I think that we need to consider a complete revision of that language since the sum referred to would be exactly the same as the revised estimate, and in my opinion it should read, "*Provided further*, That such sum is hereby made a reimbursable charge," and so forth.

Mr. JENSEN. Yes.

ADMINISTRATIVE PROVISION

Mr. BEASLEY. The next change is on page 46, and relates to the purchase of 59 passenger motorvehicles, of which 37 shall be for replacement only.

Mr. JENSEN. Now, here is a case where it might be necessary to have some new automobiles; that is, exchange automobiles. The Bureau of Land Management does have a lot of travel to do; there is no question about that. How many automobiles do they have?

Mr. BEASLEY. The Bureau of Land Management now has 147 automobiles.

Mr. JENSEN. How many out in the field?

Mr. BEASLEY. They are all in the field.

Mr. JENSEN. And they are asking for how many?

Mr. BEASLEY. They are asking for a total of 59, of which 37 would be for replacement, and 22 new, in the budget that was transmitted to the Congress.

Under the revised estimate that would be 37 for replacements and 12 new ones, a total of 49, rather than 59.

Also on page 46 there is new language that would authorize the purchase of one aircraft for replacement only.

Mr. JENSEN. How many aircraft do they have?

Mr. BEASLEY. The Bureau of Land Management has three aircraft. They are all in Alaska and have to do with the transportation of firecrews and supplies.

Mr. NORRELL. What is your next item?

BUREAU OF INDIAN AFFAIRS

RESOURCES MANAGEMENT

Mr. BEASLEY. The next item is on page 54, "Resources management, Bureau of Indian Affairs." It is the deletion of language that would authorize that appropriation to be used for expenses of exhibits. The reason that language is being deleted is because it is being transferred to the administrative provisions of the Bureau of Indian Affairs which would make all appropriations in the Bureau of Indian Affairs available for expenses of exhibits, because occasionally the need arises to meet expenses out of an appropriation other than "Resources management."

Mr. NORRELL. Well, when you get to the item that this is included in will you list it, so that we can identify it?

Mr. BEASLEY. Yes, sir, I will.

Mr. NORRELL. All right.

CONSTRUCTION

Mr. BEASLEY. The next change is on page 58, "Construction, Bureau of Indian Affairs."

The first change is the deletion of language making a certain part of the 1953 appropriation available for the liquidation of contractual authority.

In this case the authority has been completely liquidated and there is no need for a continuation of the language.

The second change appearing at the bottom of that page and continuing on page 59, is the deletion of a proviso in the 1953 Appropriation Act that made $24,000 previously appropriated available for purposes other than for which it was appropriated.

Since the purpose of that language has been accomplished, its continuation in the act is not necessary.

Mr. JENSEN. Now off the record a minute.

(Discussion off the record.)

Mr. JENSEN. Go to the next item, Mr. Beasley.

ADMINISTRATIVE PROVISIONS

Mr. BEASLEY. That is on page 67, and the first change is the insertion of new language. This is under "Administrative provisions, Bureau of Indian Affairs," and the new language is "expenses of exhibits." It is the language that is deleted under "Resources management."

Mr. NORRELL. Will this broaden your authority on exhibits?

Mr. BEASLEY. The purpose of shifting this language is not for the purpose of enlarging or increasing the program for exhibits. It is for the sole purpose of using the appropriation that is most appropriate to meet the expense of exhibits.

Mr. NORRELL. Will it enlarge the exhibit authority in any way, either in the field of exhibits or elsewhere?

Mr. BEASLEY. It would enlarge the authority in that we have more than one appropriation available. The intent of it is not to enlarge or increase authority.

Mr. NORRELL. Do you just consolidate the items for which you can do this?

Mr. BEASLEY. It would have that effect, Congressman Norrell.

Mr. NORRELL. Would it add any items to the list now that you can spend money on?

Mr. BEASLEY. It would provide that we could arrange for exhibits that we cannot now arrange. The display of Indian exhibits at certain displays is very popular.

Mr. NORRELL. In other words, that would leave the matter up to the Department?

Mr. BEASLEY. Yes, sir.

Mr. NORRELL. So far as the item was concerned or the amount to be expended?

Mr. BEASLEY. Yes, sir.

Mr. NORRELL. It would be your own judgment?

Mr. BEASLEY. It would be our own judgment, but as indicated, we do not intend to increase the scope of the program for the display of exhibits.

Mr. NORRELL. It would be an increase, would it not, possibly?

Mr. BEASLEY. It would make that possible.

Mr. BUDGE. Why should not that item be justified, just like everything else in the budget, instead of giving carte blanche authority to go any place they wanted to go at any expense?

Mr. BEASLEY. There should be a statement in the record as to what has been expended in the past for exhibits, and I will be glad to insert it in the record.

Mr. NORRELL. I think we should have that.

Mr. JENSEN. Yes, indeed, do that.

(The matter referred to follows:)

Obligations for expenses of exhibits

Actual, 1952	$101
Estimate, 1953	150
Estimate, 1954	150

CONSTRUCTION

Mr. JENSEN. Now, let us turn back to page 58 of the bill, and to that part of the language which reads:

No part of this appropration shall be used for the acquisition of land or water rights within the States of Nevada, Oregon, and Washington, either inside or outside the boundaries of the existing reservations.

Now, Congressman Horan requested that language be provided in the bill which would permit the Indians in the State of Washington to purchase land either inside or outside of the boundaries of reservations, but not to include such land as might lie in the boundaries of municipalities, towns, or other incorporated areas.

Now, will you write language which we may insert at that point in the bill which will accomplish the purpose which Mr. Horan has requested?

Mr. BEASLEY. We will be glad to do that, Congressman.

Mr. JENSEN. And you will hand that to the clerk.

Mr. BEASLEY. Yes, sir.

Mr. JENSEN. All right.

ADMINISTRATIVE PROVISIONS

Mr. BEASLEY. There is one further change on page 67, and it relates to the purchase of 309 automobiles, of which 249 shall be for replacement only. That budget request has been changed to 268, of which 242 shall be for replacement only.

Mr. JENSEN. How many automobiles does this Bureau have now?

Mr. BEASLEY. 2,357.

Of course, a lot of them are for the doctors and nurses.

Mr. JENSEN. Yes, I know, but certainly you do not need that many automobiles by a long ways.

Mr. BEASLEY. I would like to insert in the record at this point a statement as to the number of automobiles maintained by the Bureau of Indian Affairs, as well as a statement relating to the estimate for the purchase of 268 cars in 1954.

Mr. JENSEN. That will be satisfactory.
(The matter referred to is as follows:)

BUREAU OF INDIAN AFFAIRS

The inventory of vehicles for the Bureau is estimated to be 2,357 at the close of fiscal year 1953.

These vehicles provide transportation for responsible personnel of the Bureau who render to Indians all the manifold services which the ordinary citizen receives from Federal, State, county, and municipal agencies, and some additional services which the general population obtains from public or private sources. Considering the fact that the more than 430,000 Indians do not live in one place, but are scattered throughout the United States and Alaska, it is not difficult to understand that a total of 2,108 vehicles is required to furnish transportation for Bureau personnel to render the services to Indians as required by laws, treaties, and national custom.

The Indian people live in scattered settlements on the various reservations, many of which are larger than the largest counties in the Nation. The facilities which are provided for service to the Indians are scattered also. Employees must be able to go from one facility to another or to go among the Indian people and the automobile is the only means for such necessary communication.

HEALTH, EDUCATION, AND WELFARE SERVICES

The 1,257 vehicles chargeable to this appropriation are for official use by (1) the medical personnel at hospitals, sanatoriums, medical centers, and those doing public-health work throughout the reservations and (2) the area directors of schools, education field personnel, school principals, teachers, and other responsible personnel in the supervision and planning of school programs throughout the reservations. The vehicles are also used by social workers in fieldwork to contact welfare clients under the assistance program, by placement officers in contacting and interviewing persons for employment off the reservation, and by the law-and-order personnel (the criminal investigators, judges, and Indian policemen) who enforce the law on Indian reservations.

RESOURCES MANAGEMENT

The 725 vehicles chargeable to this appropriation provide transportation for (1) the forest personnel who manage the 16 million acres of timberland and 32 million acres of rangelands belonging to the Indians; (2) the extension agents, credit specialists, and home-extension personnel who work directly with the Indians teaching improved methods in farming, homemaking, and the use of credit for agricultural and small-business enterprises; (3) the soil scientists and soil engineers who start soil and moisture programs in areas where there are serious erosion problems; (4) the hearing examiners and probate attorneys who clarify the status of individual segments of Indian land.

CONSTRUCTION

A total of 102 vehicles provides transportation for the construction engineers and maintenance superintendents in the supervision and inspection of buildings and plants, construction projects and major repair programs throughout the areas.

GENERAL ADMINISTRATIVE EXPENSES

The 195 vehicles are for official use by (1) the area offices supervisory personnel in conducting all activities of the Bureau program within the area and (2) the superintendent and responsible personnel in conducting all activities of the Bureau's program on reservations.

OPERATION AND MAINTENANCE, ETC., POWER SYSTEMS, INDIAN IRRIGATION PROJECTS

The 32 vehicles provide transportation for the foreman and power personnel at the irrigation projects.

INDIAN TRIBAL FUNDS

The 46 vehicles are used for the conduct of various reservation programs for the benefit of the Indian population.

AUTHORIZATION FOR PURCHASE OF PASSENGER MOTOR VEHICLES

The Bureau of Indian Affairs needs authority to replace 242 vehicles and to purchase 26 additional vehicles. The replacements are for vehicles which have been operated in excess of 60,000 miles or are 6 or more years old. This replacement is in the interest of economy and efficiency especially because of the hard usage to which vehicles must be put in the field service of the Bureau.

The additional vehicles are essential to the conduct of the program contemplated in the budget. The public-health workers—doctors, nurses, and technicians—the soil- and moisture-conservation workers, the foresters and other specialists needed to be employed for the program aimed toward full independence for the Indians must have vehicles to do their work properly.

Mr. JENSEN. Well, when we mark up the bill the committee will go into that quite thoroughly. Off the record.

(Discussion off the record.)

CONSULTANTS

Mr. BUDGE. Before we leave page 67, I have aways been somewhat curious as to the handling of these per diem fees in cases of $100 per day.

I wonder if I could have the consent of the committee to request the Department to put in a statement giving the names, addresses, professions, and amounts paid and the reasons for which those amounts have been paid for the fiscal year 1951, 1952, and 1953?

Mr. BEASLEY. Congressman Budge, we have a statement that was recently prepared on every consultant in the Department, by bureaus, the amount of their compensation, and how much service they have performed within the last 12 months.

I would like very much to insert that statement in the record or give it to you, and if you want any additional information we could get it. It does not have the addresses or the professions, but it covers everything you ask for, I believe, except those two points.

Mr. JENSEN. I would like to have that statement in the record, and also I feel that Congressman Budge's request is proper, and you will get that information?

Mr. BEASLEY. Yes, sir.

Mr. JENSEN. All right; thank you.

Mr. BEASLEY. You want the consultants as of the latest date possible?

Mr. JENSEN. Yes.

Mr. BUDGE. Yes, I would like them for at least the last 3 fiscal years, and if it is not too much trouble you might go back further than that, but at least for the last 3 fiscal years, so we can see for what purpose this money is spent and who gets it, because every agency has this same provision in there at $100 a day, and it is a little difficult for me to understand just what all of the consulting would be for at that rate. Of course, I know you do not pay all of them that sum, but some of them must get it.

Mr. BEASLEY. We have only 3 agencies that are authorized to employ them at $100 a day, the Bonneville Power Administration, the Bureau of Indian Affairs, and the Bureau of Reclamation, and each of those have a limitation on the amount that can be spent in any one year for rates up to that amount.

Mr. BUDGE. Of course, your other agencies may do the same thing, but only pay up to $50 a day. That is another thing, and I have wondered why there is this preferential treatment, and the reason for it.

(The matter referred to follows:)

Consultants, Fiscal Year 1951

The following bureaus report no consultants for the fiscal year 1951: Geological Survey, Fish and Wildlife Service, Southwestern Power Administration, Bureau of Land Management.

Office of the Secretary, consultants, fiscal year 1951

Name	Business or home address	Profession	Total amount paid	Daily rate per day when actually employed
Barringer, John M	Deceased		$9,307.26	[1] $38.48
Bloch, Ivan	621 Park Bldg., Portland 5, Oreg	Industrial consultant	6,750.04	42.32
Fesler, James W	University of North Carolina, Chapel Hill, N. C	Professor of political science and research professor.	253.92	42.32
Fox, Bertrand	56 Beaver, New York, N. Y	Professor of economics, Harvard University.	60.60	40.40
Maass, Arthur A	Dunster, C–27, Cambridge 38, Mass	Economist	1,015.00	35.00
Mackey, James G	Agana, Guam, M. I	Attorney	2,385.76	38.48
Morse, Chandler	Lynde Lane, Williamston, Mass	Economist	70.00	35.00
Raushenbush, Stephen (Mr. Raushenbush was paid during fiscal year 1951, but actually performed services Jan. 9, 10, 11, 1950).	3503 Lowell NW., Washington, D. C	Economist (power)	105.00	35.00
Reeves, Frank	2937 Northampton NW., Washington, D. C	Geologist, petroleum engineer	4,120.80	40.40
Biemiller, Andrew J	2443 North Sherman Blvd., Milwaukee, Wis	Consultant on labor and public relations	3,216.32	42.32
Brokaw, Paris Le Mar	713 Timber Branch Dr., Alexandria, Va	Economist	3,722.40	33.84
Cazell, Gabriel F	2503 South Walter Reed Dr., Arlington, Va	do	315.00	35.00
Dresser, Ferdinand J. C	25 5th Ave., New York, N. Y	Engineer	1,605.66	[1] 40.40
Caulfield, Henry P., Jr	Alban Towers Hotel, 3700 Massachusetts Ave. NW., Washington, D. C.	Economist	70.00	35.00
Ball, Max W	1648 Foxhall Rd. NW., Washington, D. C	Oil and gas consultant	97.29	[2] 33.88
Barrows, Harlan H	1018 Oak St., Highland Park, Ill	Professor, University of Chicago	115.08	38.36
Cosman, Cornelius M	Hunterbrook Rd, R. F. D. No. 1, Peekskill, N. Y	Economist (metallurgy)	2,064.24	33.84
Craven, J. Howard	3019 Homewood Parkway, Kensington, Md. (now in Bolivia).	Economist	1,883.40	29.20
Evans, John G	1638 33d St. NW., Washington, D. C. (now with TCA—Israel).	Superintendent, Indian Agency	3,845.04	34.64
Graham, Frank P	404 Pittsboro St., Chapel Hill, N. C	Chairman of Public Hearings Committee of President's Labor-Management Conference.	931.04	42.32
Hamblen, Kenneth E	2825 Southwest Montgomery Dr., Portland, Oreg	Consulting mining and metallurgical engineer.	2,285.28	42.32
Hoyt, William G	Webatuck Rd., Wingdale, N. Y	Hydraulic engineer	217.30	42.32
Milligan, Edward A	School of Forestry, Bottineau, N. Dak	Instructor, North Dakota School of Forestry.	1,056.00	22.00
Olds, Leland	256 Melborough St., Boston, Mass	Water resources expert	2,962.40	42.32
Picken, Isabel	Post Office Drawer 1619, Tulsa 1, Okla	Staff assistant to president, Water Resources Policy Commission.	1,913.60	20.80
Searles, Richard D	Circle S Ranch, Route 1, Box 246, Scottsdale, Ariz	President of Water Users Association and rancher.	2,327.60	42.32

Sucher, Ralph G	157 West 57th St., New York, N. Y.	Consultant on hydroelectric power	1,301.34	42.32
Waring, Frank A	American Embassy, Tokyo, Japan	Former Chairman, U. S. Philippine War Damage Commission.	2,116.00	42.32
Watkins, Charles D	4302 Sheridan St., Hyattsville, Md	Reporter, Associated Press	3,633.58	29.20
Wengert, Norman I	Fargo, N. Dak. (North Dakota Agricultural College)	Professor of public administration	119.65	33.00
Wicart, Carlton B	1523 28th St. NW., Washington, D. C		550.16	42.32
Total			60,416.76	

[1] Minus annuity.
[2] GS–15, $10,500.

Bonneville Power Administration, consultants on rolls, fiscal year 1951

Name	Home address	Title	Amount paid	Rate per day
Bellaschi, Peter L	346 North Oakland Ave., Sharon, Pa	Electrical engineer (consultant)	$7,152.08	$42.32
Boehne, Eugene W	26 Seaward Rd., Wellesley Hills 82, Mass	do	1,692.80	42.32
Cox, Horace E	730 Northeast Weidler, Portland, Oreg	Materialman	1,144.00	20.80
Starr, Eugene W	2421 Northeast Irving, Portland, Oreg	Electrical engineer (consultant)	4,636.08	33.84
Hetherton, Percival	1115 Southwest 11th Ave., Portland, Oreg	Administrative officer (consultant)	6,914.40	29.20
Total			21,539.36	

Southeastern Power Administration, report on consultants, fiscal year 1951

Name	Address	Profession	Total amount paid	Daily rate
Charles W. Leavy	Southeastern Power Administration, Elberton, Ga	Consultant attorney	$689.16	$35
Edward J. Condon, Jr	do	Consultant electrical engineer	315.00	30
George W. Hamilton	5406 41st St. NW., Washington, D. C	Consultant engineer	818.13	35
Total			1,822.29	

Bureau of Indian Affairs, Washington, D. C., report of consultants for fiscal year 1951

Name	Profession	Business address	Daily rate	Total amount paid
Barry Dibble	Engineer	120 East Palm Lane, Redlands, Calif	$50	$1,200.00
Edward F. Dibble	do	107 Garden Hills, Redlands, Calif	$35	590.63
Frank M. Purdy	do	3204 Summit View, Yakima, Wash	$35 (less annuity)	485.52
Dr. Wm. A. Schoenfeld	Economist	506 North 35th St., Corvallis, Oreg	$50 to Oct 28, 1952; $45 (Oct. 29, 1952), less $18.70 annuity.	468.23
Walter V. Woehlke	do	Care of Edward F. Crowfut, American Embassy, APO 777, Postmaster, New York, N. Y.	$40 (less $9.10 annuity)	370.80
Wilbur S. Hanna	Engineer	719 Highland Park Dr., Billings, Mont	$35 (less $20.48 annuity)	319.44
Ake L. Alin	do	5927 North 24th St., Omaha, Nebr	$75	375.00
Total				3,809.62

Bureau of Reclamation, consultant services, fiscal year 1951

Name	Business address	Profession	Total amount paid	Rate paid
Banks, Frank A	302 Ferry, Coulee Dam, Wash	Consulting engineer	$6,435.33	$100
Bashore, Harry W	Mitchell, Nebr	do	2,768.44	100
Beatty, William C	2221 Kearney St., Denver, Colo	do	3,519.94	50
Berkey, Charles P	1076 Cumbermede Rd., Palisades, N. J	do	1,500.00	100
Comstock, Harold D	407 Yellowstone Ave., Billings, Mont	do	3,329.91	50
Dowling, Paul H	308 South Rodeo Dr., Beverly Hills, Calif	Motion-picture consultant	330.00	30
Fisher, Lloyd H	2693 Shasta Rd., Berkeley, Calif	Agricultural-labor consultant	1,120.00	35
Frazer, Guernsey	6631 Maryland Dr., Los Angeles 48, Calif	Special consultant (administration)	4,445.00	35
Iakisch, John	921 East 13th Ave., Denver, Colo	Consulting engineer	217.20	50
Hill, Knute	Ephrata, Wash	Consulting appraiser	3,745.28	25
Hill, Raymond A	601 West 5th St., Suite 1000, Los Angeles 17, Calif	Consulting engineer	1,687.50	100
Jarrett, George J	1412 17th Ave., San Francisco, Calif	Organizational consultant	3,675.00	35
Kubach, William F	6350 North Central Ave., Phoenix, Ariz	Consultant (fiscal)	717.81	50
LeNoir, William S	458 Hopkins Rd., Sacramento, Calif	Graphic arts consultant	798.43	35
Littman, Frederic F	2037 Southwest Broadway, Portland, Oreg	Consulting architectural engineer	3,893.75	35
Longwell, John	21 King Ave., Piedmont, Calif	Consulting engineer	225.00	75
Mapel, Thomas	Route 5, Box 7301, Sacramento, Calif	Consulting appraiser	1,075.00	50
Means, Thomas H	111 Sutter St., San Francisco, Calif	Consulting engineer	500.00	50
Morris, Earl	518 Empire Bldg., Denver, Colo	Consulting architectural engineer	2,018.75	50
Miner, Roland R	McCook, Nebr	Consulting appraiser	50.00	50
Newell, Robert J	3 Hulbe Rd., Boise, Idaho	Consulting engineer	2,622.96	100
Richardson, A. B	McCook, Nebr	Consulting appriaser	150.00	50
Savage, John S	1651 Dahlia St., Denver 7, Colo	Consulting engineer	324.56	100
Stubblefield, Garfield	Route 1, Box 75, Folsom, Calif	do	4,495.48	50
Taylor, Paul S	1163 Euclid Ave., Berkeley 8, Calif	Consulting economist	3,150.00	50
Tollefson, Howard	502–4 Commerce Bldg., Everett, Wash	Consulting architect (landscape)	3,702.40	35
Young, Walker R	1321 East 10th Ave., Denver, Colo	Consulting engineer	521.82	100
Total, 27			57,019.56	

CONSULTANTS EMPLOYED BY THE OFFICE OF TERRITORIES, FISCAL YEAR 1951

Name	Address	Profession	Total amount paid	Rate per day when actually employed
Benjamin W. Thoron	Washington Cathedral Association, Wisconsin and Massachusetts Aves., Washington, D. C.	Finance analyst	$89.93	$42.32
Donald J. O'Connor	Office of Puerto Rico, 903 16th St. NW., Washington, D. C.	Economist	2,859.06	35.00
Edwin M. Fitch	R. F. D. No. 1, McLean, Va	Labor relations adviser	6,057.36	33.84
James A. Giddings	1713 Summit View, Austin 3, Tex	Finance analyst	[1] 105.80	42.32
Olive W. Goldman	203 Michigan Ave., Urbana, Ill	Consultant on statehood for Hawaii and Alaska.	225.00	25.00
Marshall S. Spaulding	1331 Park Ave., Baltimore, Md	Consultant on personnel organization	[1] 200.00	40.00
Henry C. Wolfgram	Post Office Box 423, San Diego 9, Calif	Engineer	[1] 100.00	40.00
Total			9,637.15	

[1] Paid for services rendered in fiscal year 1950.

[1] Paid for services rendered in fiscal year 1950.

Bureau of Mines consultants, fiscal year 1951

Name	Address (headquarters)	Profession	Total amount paid	Daily rate
Stuart St. Clair	Hudson View Gardens, West 183d St., New York 33, N. Y.	Geologist and engineer	$442.50	$41.54
Cloyd M. Smith	2500 24th St. North, Arlington, Va.	Mining engineer	2,009.31	36.92
Herbert F. Coward	15 Gladstone Rd., Sheffield 10, England	Chemical engineer	1,049.60	36.92
Herbert D. Kynor, Sr.	219 North Laurel St., Hazelton, Pa.	Mining engineer	415.38	[1]
Roland D. Parks	3 Upland Rd., Lexington 73, Mass.	Professor and mining engineer	708.72	32.15
Oliver Bowles	5000 Massachusetts Ave. NW., Washington 16, D. C.	Mining engineer and geologist	5,436.72	36.92
William Ward Tamplin	45 Old La Honda Rd., Redwood City, Calif.	Mining engineer	6,288.67	41.54
Paul G. Clark	Stetson Rd., Williamstown, Mass.	Business economist	905.51	32.15
Guy E. Diehl	1575 Vermilion Rd., Duluth 5, Minn.	Engineer	1,008.02	32.15
Bryan R. Frisbie	127 Eastmoor Dr., Silver Spring, Md.	Mining engineer	3,520.27	27.08
Charles W. Wright	32 West 42d St., New York, N. Y.	do	3,850.20	36.92
John B. Lewis	4817 Erskine Way, Seattle 6, Wash.	do	320.19	32.15
William J. Kroll	Red Coach Inn, Buffalo Ave., Niagara Falls, N. Y.	Metallurgist	6,687.81	41.36
Joseph Daniels	University of Washington, Seattle, Wash.	Mining engineer	849.83	27.04
H. Gordon Poole	2114 East 61st St., Seattle, Wash.	Metallurgist	124.10	29.20
Jesse S. Walton	2023 Monroe St., Corvallis, Oreg.	Chemical engineer	1,598.68	32.16
Herbert R. Hanley	Post Office Box 318, Rolla, Mo.	Metallurgical engineer	236.84	27.04
Joseph J. Beeson	1021 Barbara Pl., Salt Lake City, Utah	Mining geologist and engineer	33.84	33.84
Lionel E. Booth	1445 Gilmer Dr., Salt Lake City, Utah	Metallurgical engineer	4,061.16	36.92
Philip B. Bucky	Columbia University, New York, N. Y.	Mining engineer	897.20	32.15
Thomas G. Chapman	Post Office Box 4097, care of Bureau of Mines, Tucson, Ariz.	Metallurgical engineer	169.20	36.92
Morris J. Elsing	Post Office Box 1328, Tucson, Ariz.	Mining engineer	2,267.58	36.92
Meyer H. Chetrick	Vets Apartment, 19 University Campus, Grand Forks, N. Dak.	Mining engineer	2,899.75	23.60
Frank H. Grout	911 Southeast 7th St., Minneapolis, Minn.	Chemical engineer	2,330.87	32.16
Louis C. Harrington	319 South 6th St., Grand Forks, N. Dak.	Geologist	744.48	33.84
Floyd H. Frame	703 East 12th St., Rolla, Mo.	Engineer	2,843.23	27.84
Otto Ruhl	207 North Byers, Joplin, Mo.	Electrical engineer	2,387.74	27.84
Walter L. Heldenreich	237 Bonita Ave., Piedmont, Calif.	Mining engineer	4,559.04	24.64
J. Reed Denison	1164 East College Ave., Batesville, Ark.	do	172.48	24.64
Erwin Amick	Columbia University, New York, N. Y.	Technical expert	80.80	43.44
Wayne C. Edmister	Carnegie Institute of Technology, Pittsburgh, Pa.	Chemical engineer	40.40	43.44
Arthur W. Gittins	University of Pittsburgh, Pittsburgh, Pa.	do	1,606.99	30.77
Walter L. Herold	Herold Manufacturing Co., Scranton, Pa.	Metallurgist	1,221.22	27.04
Melvin S. Newman	Ohio State University, Columbus, Ohio.	Mechanical engineer	80.80	43.44
John M. Provost	3243 Beacon Hill Ave., Pittsburgh, Pa.	Chemical engineer	1,379.59	27.04
Walter Coopey	1530 Virginia St., Charleston, W. Va.	Mining engineer	1,399.71	41.52
Gaston F. DuBois	1925 Railway Exchange Bldg., St. Louis, Mo.	Chemical engineer	153.92	41.52
Arthur J. Blair	Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.	do	169.40	30.80
Blanford B. Burgess	Monticello, Ga.	Geologist	1,082.12	24.64
Hugh D. Pallister	Box O, University, Ala.	Mining engineer	20.80	20.80
Milton H. Fies	3236 Salisbury Rd., Birmingham, Ala.	do	893.84	40.40
Nelson Severinghouse	213 Glenn Circle, Decatur, Ga.	do	65.70	29.20
H. Stuart Auvil	4825 East 21st St., Indianapolis, Ind.	do	64.00	24.64
Herbert H. Greger	Route No. 1, Rockville, Md.	Fuels technologist	5,397.60	[2]
Charles E. White	4405 Beechwood Rd., Hyattsville, Md.	Ceramic engineer	266.49	36.92
		Chemist		
Total			72,742.30	

[1] $36.92 to Nov. 24, 1951; $41.54 to date.

[2] $36.92 to June 22, 1952; $37.68 to date.

National Park Service, consultants, fiscal year 1951

Name	Address	Profession	Total amount paid	Daily rate
Robert M. McKee	Pan American Bank Bldg., Miami, Fla	Appraiser	$964.55	$40.40
William Platt	101 Park Ave., New York 17, N. Y	Architect	720.72	24.64
John P. Buwalda	California Institute of Technology, Pasadena, Calif	Professor of geology	86.64	14.58
William E. Colby	Mills Bldg., San Francisco, Calif	Attorney	86.14	14.58
Albert A. Woodward	Los Angeles County Museum, Los Angeles, Calif	Historian	3,008.84	27.04
Harlan P. Kelsey	Kelsey Rd., East Boxford, Mass	Horticulturist	1,105.90	40.40
Leo H. Cleary	1022 20th St. NW., Washington, D. C	Engineer	1,162.50	60.00
John Monteith, Jr	4852 Hutchins Pl. NW., Washington, D. C	Turf specialist	228.00	24.00
Joseph D. Lohman	4901 Ellis Ave., Chicago, Ill	Human relations expert	2,465.00	85.00
Total			9,829.29	
Grand total, 1951			236,815.33	

The following bureaus report no consultants for the fiscal year 1952: Southeastern Power Administration, Fish and Wildlife Service, Southwestern Power Administration, and Bureau of Land Management.

Office of the Secretary, consultants, fiscal year 1952

Name	Business or home address	Profession	Total amount paid	Daily rate per day when actually employed
Sucher, Ralph G	157 West 57th St., New York, N. Y	Consultant on hydroelectric power	$10,950.30	$42.32
Waring, Frank A	American Embassy, Tokyo, Japan	Former Chairman, U. S. Philippine War Damage Commission.	211.60	42.32
Watkins, Charles D	4302 Sheridan St., Hyattsville, Md	Reporter, Associated Press	4,204.80	29.20
Wicart, Carlton B	1523 28th St. NW., Washington, D. C	Finance	529.00	42.32
Ankeah, Sam	Box 94, Window Rock, Ariz	Chairman, Navaho Tribal Council	50.00	25.00
Clarenbach, Fred A	3501 Kanawha NW., Washington, D. C	Professor of political science, Madison, Wis.	74.00	37.00
Cottier, Henry	Martin, S. Dak	Member, Oglala-Sioux Tribal Council	50.00	25.00
Curry, Reginald	Box 67, Fort Duchesne, Utah	Business manager, Fort Duchesne	50.00	25.00
Da, Popovi	Post Office Box 903, Santa Fe, N. Mex	Chairman, All Pueblo Council	50.00	25.00
Gabrielson, Ira N	Hunter Mill Rd., Vienna, Va	Biologist, former Director, Fish and Wildlife Service.	160.30	[1] 42.32
Maass, Arthur A	Dunster C–27, Cambridge 38, Mass	Economist	175.00	35.00
Parks, W. Robert	Care of Iowa State College, Ames, Iowa	Associate professor	3,520.00	40.00
St. Clair, Herman	Fort Washakie, Wyo	Consultant of Indian affairs (Shoshone)	50.00	25.00
Biemiller, Andrew J	2443 North Sherman Blvd., Milwaukee, Wis	Consultant on labor and public relations	9,144.16	42.32
Barringer, John M	Deceased (check cancelled due to death)		784.52	38.48
Bloch, Ivan	621 Park Bldg., Portland 5, Oreg	Industrial consultant	1,227.28	45.38
Brokaw, Paris Le Mar	713 Timber Branch Dr., Alexandria, Va	Economist	9,297.32	36.92
Cazell, Gabriel F	2503 South Walter Reed Dr., Alexandria, Va	do	595.00	35.00
Cosman, Cornelius	Hunterbrook Rd., R. F. D. No. 1, Peekskill, N. Y	Economist (metallurgy)	5,076.00	33.84
Evans, John G	1638 33d St. NW., Washington, D. C., (now TCA—Israel)	Superintendent, Indian Agency	1,639.52	34.64
Hamblen, Kenneth E	2825 Southwest Mongomery Dr., Portland, Oreg	Consulting mining and metallurgical engineer.	2,475.72	42.32
Hoyt, William G	Webatuck Rd., Wingdale, N. Y	Hydraulic engineer	369.42	42.32
Milligan, Edward A	School of Forestry, Bottineau, N. Dak	Instructor, North Dakota School of Forestry.	1,331.00	22.00
Picken, Isabel	Post Office Drawer 1619, Tulsa 1, Okla	Staff assistant to president, Water Resources Policy Commission.	644.80	20.80
Tyner, Davis	Shawnee, Okla	Member, Shawnee Tribal Council	50.00	25.00
Whitman, Carl, Jr	Elbowoods, N. Dak	Member, Fort Berthold Tribal Council	50.00	25.00
Wilson, Harper H	Princeton University, Princeton, N. J	Associate professor of politics, Princeton University.	1,015.00	35.00
Total			53,774.74	

[1] Less annuity.

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Bonneville Power Administration, consultants on rolls, fiscal year 1952

Name	Home address	Title	Amount paid	Rate per day
Bellaschi, Peter L	346 North Oakland Ave., Sharon, Pa	Engineer	$8,339.52	$55.00
Boehne, Eugene W	26 Seaward Rd., Wellesley Hills 82, Mass	Electrical engineer (consultant)	1,623.36	45.36
Hetherton, Percival	1115 South West 11th Ave., Portland, Oreg	Administrative officer (consultant)	8,297.28	32.16
Starr, Eugene W	2421 North East Irving, Portland, Oreg	Electrical engineer (consultant)	5,544.00	36.96
Boring, George A	6252 52d NE., Seattle, Wash	Corporation management	2,508.36	42.32
Total			26,312.52	

Report of consultants employed by the Geological Survey, fiscal year 1952

Name	Business address	Profession	Salary per day when actually employed	Total amount paid
Trischka, Carl	609 Bisbee Rd., Warren, Ariz	Mining geologist	$50	$500
Total				500

Bureau of Indian Affairs, report of consultants for fiscal year 1952

Name	Profession	Business address	Daily rate	Total amount paid
Barry Dibble	Engineer	120 East Palm Lane, Redlands, Calif	$50	$4,270.00
Edward F. Dibble	do	107 Garden Hills, Redlands, Calif	$35	2,257.49
Paul Gyorgy	Medical Officer	University of Pennsylvania, 3600 Spruce St., Philadelphia, Pa.	$20	360.00
Raymond Hill	Engineer	601 West 5th St., Los Angeles, Calif	$50	118.75
Arthur B. Melzner	Attorney	2911 6th Ave., North Billings, Mont	$45 (less $7.38 annuity)	2,116.01
Frank M. Purdy	Engineer	3201 Summit View, Yakima, Wash	$35 (less annuity)	431.76
Mont H. Saunderson	Economist	117 West Garfield, Bozeman, Mont	$15	1,701.00
Clay Southworth	Engineer	4108 East Cambridge Ave., Phoenix, Ariz	$50 (less $11.95 annuity)	1,426.85
Walter V. Woehlke	Economist	Care of Edward F. Crowfut, American Embassy, APO 777, Postmaster, New York, N. Y.	$40 (less $9.10 annuity)	123.60
Total				12,805.46

Bureau of Reclamation consultant services, fiscal year 1952

Name	Business address	Profession	Total amount paid	Rate per day
Abrams, Charles	225 Broadway, New York, N. Y.	Community development consultant	$100.00	$50
Banks, Frank A	302 Ferry, Coulee Dam, Wash	Consulting engineer	10,978.88	100
Bashore, Harry W	Mitchell, Nebr	do	2,177.89	100
Beatty, William C	2221 Kearney St., Denver, Colo	do	3,980.44	50
Burkholder, Joseph	314-321 Union Bldg., San Diego 1, Calif	do	250.00	50
Clark, John M	41 Wright St., Westport, Conn	do	3,000.00	100
Comstock, Harold D	407 Yellowstone Ave., Billings, Mont	Consultant (economist)	3,029.34	50
Edwards, Daniel G	1402 Avenue B, Gothenburg, Nebr	Consulting engineer	70.00	35
Gay, Robert W	112 North 2d St., Boise, Idaho	do	1,651.20	35
Grant, Eugene L	2045 Tasso St., Palo Alto, Calif	do	2,850.00	100
Harris, Russell S	333 Ramona Ave., Piedmont 11, Calif	Consultant (engineer)	250.00	50
Iakisch, John	921 East 13th Ave., Denver, Colo	Consulting engineer	470.60	50
Jarrett, George A	1412 17th Ave., San Francisco, Calif	do	1,120.00	35
Jones, David M	Rural delivery No. 1, Rosedale Rd., and Hedgewood, Schenectady, N. Y.	Organizational consultant	650.00	50
Kelley, Walter P	Berkeley, Calif	Consulting engineer	50.00	50
Kelso, Maurice M	517 East Koch, Bozeman, Mont	do	3,012.50	100
Littman, Frederic F	2037 Southwest Broadway, Portland, Oreg	Consultant (economist)	2,747.50	35
Maple, Thomas C	Route 5, Box 7301, Sacramento 15, Calif	Consulting architectural engineer	750.00	50
McBirney, Harry R	2644 Fairfax, Denver, Colo	Consulting appraiser	196.84	50
Means, Thomas H	111 Sutter St., San Francisco, Calif	Consulting engineer	275.00	50
Mesmer, John F	1515 West 5th St., North Platte, Nebr	do	455.00	35
Newell, Robert J	3 Hulbe Rd., Boise, Idaho	Consulting appraiser	3,088.76	100
O'Cheskey, Fred L	Box 414, Carlsbad, N. Mex	Consulting engineer	700.00	50
Savage, John L	1651 Dahlia St., Denver, Colo	Consulting agriculturist	770.83	100
Scholer, Charles H	Kansas State College, Manhattan, Kans	Consulting engineer	150.00	50
Selby, Halbert E	2037 38th St. SE., Washington 20, D. C	do	2,637.50	100
Shaffer, Ford G	701 Main St., Woodland, Calif	Consulting economist	50.00	50
Singstad, Ole	1120 Fifth Ave., New York, N. Y	Consulting appraiser	531.25	100
Stubblefield, Garfield	Route 1, Box 75, Folsom, Calif	Consulting engineer	4,372.00	50
Taylor, Paul S	1163 Euclid Ave., Berkeley 8, Calif	do	1,850.00	50
Tollefson, Howard	502-504 Commerce Bldg., Everett, Wash	Consulting economist	2,170.01	35
Young, Walker R	1321 East 10th Ave., Denver, Colo	Consulting architect (landscape)	655.60	100
Total (32)		Consulting engineer	55,041.14	

Consultants employed by the Office of Territories, fiscal year 1952

Name	Address	Profession	Total amount paid	Rate per day when actually employed
Louise F. McCarthy	Madison Apartments, D 10, Madison and Hillman Sts., Bethlehem, Pa.	Lawyer	$58.50	$36.00
Benjamin W. Thoron	Washington Cathedral Association, Wisconsin and Massachusetts Aves., Washington, D. C.	Finance analyst	433.84	42.32
Donald J. O'Connor	Office of Puerto Rico, 903 16th St. NW., Washington, D. C.	Economist	891.32	35.00
Fred Simon	769 Upsal St. SE., Washington, D. C.	Lawyer	2,279.76	42.32 33.04
Total			3,663.42	

Bureau of Mines, consultants, fiscal year 1952

Name	Headquarters	Profession	Total amount paid, fiscal year 1952	Rate of pay per diem
Charles T. Holland	Post Office Box 836, Blacksburg, Va	Mining engineer and professor	$3,350.69	$41.54
Herbert D. Kynor, Sr	219 North Laurel St., Hazelton, Pa	Mining engineer	6,359.91	[1]
Philip S. Miller	96 Longview St., West Orange, N. J	Civil engineer	5,556.74	41.54
William H. Lesser	1322 Myrtle St., Scranton, Pa	Mechanical engineer	415.20	41.54
Oliver Bowles	5000 Massachusetts Ave. NW., Washington 16, D. C	Mining engineer and geologist	5,940.20	36.92
Paul G. Clark	Stetson Rd., Williamstown, Mass	Business economist	1,424.74	32.15
Charles W. Wright	32 West 42d St., New York, NY	Mining engineer	5,377.52	36.92
John B. Lewis	4817 Erskine Way, Seattle 6, Wash	do	[2] 10,024.68	[2] 32.15
Joseph Daniels	University of Washington, Seattle, Wash	do	1,664.98	27.04
Jesse S. Walton	2023 Monroe St., Corvallis, Oreg	do	1,442.44	32.16
Marvin J. Udy	546 Portage Rd., Niagara Falls, NY	Chemical engineer	136.08	45.36
Lionel E. Booth	1445 Gilmer Dr., Salt Lake City, Utah	Chemical and metallurgical engineer	377.22	36.92
Morris J. Elsing	Post Office Box 1328, Tucson, Ariz	Metallurgical engineer	5,883.78	36.92
Meyer H. Chetrick	Vets Apartment, 19 University Campus, Grand Forks, N. Dak.	Mining engineer	1,746.45	23.60
Frank H. Grout	911 Southeast 7th St., Minneapolis, Minn	Chemical engineer	1,453.22	32.16
Robert S. Hill	816 Columbus St., Rapid City, S. Dak	Geologist	453.29	27.04
Arthur W. Koth	813 Sunset Dr., Grand Forks, N. Dak	Mining engineer	297.48	32.16
Floyd H. Frame	703 East 12th St., Rolla, Mo	Chemical engineer	3,205.12	27.84
Otto Ruhl	207 North Byers, Joplin, Mo	Electrical engineer	692.32	27.84
Edward L. Williams	Texas Agricultural and Mechanical College, College Station, Tex.	Mining engineer	3,003.40	41.52
Newell G. Alford	Oliver Bldg., Pittsburgh, Pa	Vocational industrial educationist	136.08	45.36
Wayne C. Edmister	Carnegie Institute of Technology, Pittsburgh, Pa	Mining engineer	43.44	43.44
Walter L. Herold	Herold Manufacturing Co., Scranton, Pa	Chemical engineer	440.24	27.04
Melvin S. Newman	Ohio State University, Columbus, Ohio	Mechanical engineer	192.44	43.44
John M. Provost	3243 Beacon Hill Ave., Pittsburgh, Pa	Chemical engineer	3,417.66	27.04
Walter Coopey	1530 Virginia St., Charleston, W. Va	Mining engineer	1,463.58	41.52
Hugh D. Pallister	Box O, University, Ala	Chemical engineer	192.40	22.88
Herbert H. Greger	Route No. 1, Rockville, Md	Mining engineer	8,945.49	36.92
Charles E. White	4405 Beechwood Rd., Hyattsville, Md	Ceramic engineer	790.74	36.92
Total		Chemist	74,427.53	

[1] $36.92 to Nov. 24, 1951; $41.54 to date.
[2] Employed on full-time basis.

National Park Service, consultants, fiscal year 1952

Name	Address	Profession	Total amount paid	Daily rate
Robert M. McKee	Pan American Bldg., Miami, Fla	Appraiser	$2,422.00	[1]
William E. Platt	101 Park Ave., New York 17, N. Y	Architect	135.84	[2]
John P. Buwalda	California Institute of Technology, Pasadena 4, Calif	Professor of geology	81.12	$27.04
William E. Colby	Mills Bldg., San Francisco, Calif	Attorney	81.12	27.04
Frederick L. Olmsted	Care of Olmsted Bros., Brookline, Mass	Landscape architect	81.12	27.04
Albert A. Woodward	Los Angeles Museum, Los Angeles, Calif	Historian	338.37	27.04
Harlan P. Kelsey	Kelsey Rd., East Boxford, Mass	Horticulturist	733.06	43.44
Leo H. Cleary	1022 20th St. NW., Washington, D. C	Engineer	300.00	60.00
John Monteith, Jr	4852 Hutchins Pl. NW., Washington, D. C	Turf specialist	964.50	24.00
Joseph D. Lohman	4901 Ellis Ave., Chicago, Ill	Human relations expert	1,530.00	85.00
Total			6,660.13	
Grand total, 1952			233,184.94	

[1] $40.40 July 1 to July 7, 1951; $43.44 thereafter.
[2] $24.64 July 1 to July 7, 1951; $27.04 thereafter.

The following bureaus report no consultants for the fiscal year 1953: Geological Survey, Southeastern Power Administration, Southwestern Power Administration, and Bureau of Land Management.

Office of the Secretary, fiscal year 1953

Name	Business or home address	Profession	Total amount paid	Daily rate
Brolaw, Paris LeMar	713 Timber Branch Dr., Alexandria, Va	Economist	$4,098.12	$36.92
Chalepah, Alfred	Route 3, Apache, Okla	Indian leader (Kiowa-Apache Tribe)	50.00	25.00
Clarenbach, Fred A	3601 Kanawha NW., Washington, D. C	Professor of political science, Madison, Wis.	518.00	37.00
Cooper, Evelyn S	Post Office Drawer 1619, Tulsa, Okla	Staff assistant to President's Water Resources Policy Commission.	2,325.00	25.00
LaRoche, Richard	Lower Brule, S. Dak	Member Sioux Tribal Council	50.00	25.00
Long, Jasper	St. Xavier, Mont	Indian leader (Crow Tribe)	50.00	25.00
Mauss, Arthur A	Dunster, C–27, Cambridge 38, Mass	Economist	555.00	40.00
Maytubby, Floyd	1905 APCO Tower, Oklahoma City, Okla	Principal Chief of Chickasaw Nation	50.00	25.00
Newman, Ralph M	Langley, McLean, Va	Commodity industry analyst	5,131.88	36.92
Nixon, John M	6 Kirkland Rd., Cambridge, Mass	Economist	74.00	37.00
Reevis, Charles	Browning, Mont	Consultant Indian affairs (Blackfeet Tribe).	50.00	25.00
Segundo, Thomas	Sells, Ariz	Chairman of tribal council (Papago Tribe).	50.00	25.00
Sucher, Ralph G	157 West 57th St., New York, N. Y	Consultant on hydroelectric power	952.20	42.32
Wengert, Norman I	North Dakota Agricultural College, Fargo, N. Dak	Professor of public administration	320.00	40.00
Wilson, Ed	Ball Club, Minn	Representative of Minnesota Chippewas	50.00	25.00
Wilson, Harper H	Princeton, N. J	Associate professor of politics, Princeton University.	385.00	35.00
Wollman, Nathaniel	3716 Anderson Ave. SE., Albuquerque, N. Mex	Associate professor of economics, University of New Mexico.	4,333.00	36.00
Woodruff, William W	4928 Deal Dr. SE., Washington 20, D. C	Formerly on staff of U. S. Senate Committee on Appropriations.	1,370.49	41.53
Yava, Albert	Route 1, Parker, Ariz	Consultant Indian affairs (Hopi Tribe)	50.00	25.00
Yazzie, Maxwell	Tuba City, Ariz	Owner trading post. Former council member. Consultant Indian affairs.	50.00	25.00
Total			20,512.69	

Bonneville Power Administration, consultants on rolls, fiscal year 1953

Name	Home address	Title	Amount paid	Rate per day
Bellaschi, Peter L	346 North Oakland Ave., Sharon, Pa	Electrical engineer (consultant)	$1,760 00	$55.00
Boehne, Eugene W	26 Seaward Rd., Wellesley Hills 82, Mass	do	1,632 96	45.36
Hetherton, Percival	1115 Southwest 11th Ave., Portland, Oreg	Administrative officer (consultant)	6,110.40	32.16
Starr, Eugene W	2421 Northeast Irving, Portland, Oreg	Electrical engineer (consultant)	5,987.52	36.96
Hurd, Clinton T	Post Office Box 1973, Portland, Oreg	Power utility (consultant)	3,000 00	50.00
Childs, LeRoy	707 Oak St., Hood River, Oreg	Orchardist	868.32	32.16
Boring, George A	6252 52d NE., Seattle, Wash	Corporation management	1,142.64	42.32
Total			20,501.84	

Department of the Interior, Fish and Wildlife Service, special report on consultants for fiscal year 1953 (Mar. 31, 1953)

Name	Address	Profession	Total amount paid	Daily rate when actually employed
Carter, Charles A	3629 Greenway Dr. SE., Washington 23, D. C	Commodity specialist (fishery expert)	$575.92	[1] $25.04
Total			575.92	

[1] Appointment restricted not to exceed 45 working days.

Bureau of Indian Affairs, report of consultants for fiscal year through Mar. 28, 1953

Name	Profession	Business address	Daily rate	Total amount paid
Barry Dibble	Engineer	120 East Palm Lane, Redlands, Calif	$50	$2,425.00
Edward F. Dibble	do	107 Garden Hills, Redlands, Calif	$35	975.63
Arthur B. Melzner	Attorney	2911 6th Ave., North Billings, Mont	$45 (less $7.38 annuity)	2,832.06
Mont H Saunderson	Economist	117 West Garfield, Bozeman, Mont	$45	6,624.00
Dr. Wm. A. Schoenfeld	do	506 North 35th St., Corvallis, Oreg	$50 to Oct. 28, 1952; $45 (Oct. 29, 1952) (less $18.70 annuity).	1,946.20
Clay Southworth	Engineer	4108 East Cambridge Ave., Phoenix, Ariz	$50 (less $11.95 annuity)	877.00
Total				15,699.89

Bureau of Reclamation consultant services, fiscal year 1953 (through Apr. 6, 1953)

Name	Business address	Profession	Total amount paid	Rate per day
Banks, Frank A	302 Ferry, Coulee Dam, Wash	Consulting engineer	$4,063.56	$100
Bashore, Harry W	Mitchell, Nebr	do	2,240.98	100
Comstock, Harold D	407 Yellowstone Ave., Billings, Mont	do	1,357.98	50
Denit, W. Darlington	3311 Military Rd., Sioux Falls, Iowa	Consultant (community planning and fiscal).	687.50	100
Goode, S. E., Sr	1612 North Broadway, Santa Ana, Calif	Consultant (appraiser)	2,775.00	75
Jones, Donald C	(Died)	do	2,925.00	75
Kelley, Walter P	Berkeley, Calif	Consulting engineer	250.00	50
Kubach, William F	6350 North Central Ave., Phoenix, Ariz	Consultant (fiscal)	2,090.01	50
Lantz, L. S	1316 38th St., Sacramento, Calif	Consulting appraiser	400.00	50
Littman, Frederic F	2037 Southwest Broadway, Portland, Oreg	Consulting architectural engineer	1,575.00	35
Means, Thomas H	111 Sutter St., San Francisco, Calif	Consulting engineer	150.00	50
Newell, Robert J	3 Hulbe Rd., Boise, Idaho	do	2,233.09	100
Northrop, Vernon D	4816 Tilden St. NW., Washington, D. C	Consultant (administration)	375.00	75
Savage, John L	1651 Dahlia St., Denver, Colo	Consulting engineer	243.42	100
Stubblefield, Garfield	Route 1, Box 75, Folsom, Calif	do	2,030.64	50
Taylor, Paul S	1163 Euclid Ave., Berkeley, Calif	Consulting economist	50.00	50
Young, Walker R	1321 East 10th Ave., Sioux Falls, Iowa	Consulting engineer	573.65	100
Total (17)			24,020.83	

Office of territories, consultants, fiscal year 1953

Name	Address	Profession	Total amount paid	Daily rate
Knight G. Aulsbrook	1638 R St. NW., Washington, D. C	Lawyer	$3,811.50	$36.96
Louise F. McCarthy	Madison Apartments, D10, Madison and Hillman Sts., Bethlehem, Pa.	do	252.00	36.00
Benjamin W. Thoron	Washington Cathedral Association, Wisconsin and Massachusetts Ave., Washington, D. C.	Finance analyst	1,657.17	43.44
Donald J. O'Connor	Office of Puerto Rico, 903 16th St. NW., Washington, D. C.	Economist	2,540.16	[1]
Total			8,260.83	

[1] $42.32 to October 1952; $45.36 to date.

Department of the Interior, Bureau of Mines, consultants, fiscal year 1953

Name	Address	Profession	Rate or pay per diem	Total amount paid, fiscal year 1953
Thomas G. Chapman	Post Office Box 4097, care of Bureau of Mines, Tucson, Ariz.	Metallurgical engineer	$36.92	$457.38
Morris J. Elsing	Post Office Box 1328, Tucson, Ariz	Mining engineer	36.92	5,365.81
Alex C. Burr	513 4th Ave. SE., Jamestown, N. Dak	Chemical engineer	34.48	137.92
Meyer H. Chetrick	Vets Apartment, 19 University Campus, Grand Forks, N. Dak.	do	23.60	2,240.74
Robert S. Hill	816 Columbus St., Rapid City, S. Dak	Mining engineer	27.04	432.64
Arthur W. Koth	813 Sunset Dr., Grand Forks, N. Dak	Chemical engineer	32.16	52.26
Floyd H. Frame	703 East 12th St., Rolla, Mo	Electrical engineer	27.84	2,535.68
Otto Ruhl	207 North Byers, Joplin, Mo	Mining engineer	27.84	268.45
Edward L. Williams	Texas Agricultural and Mining College, College Station, Tex.	Vocational industrial educationist	41.52	1,981.08
Martin A. Elliott	Illinois Institute of Technology, Chicago, Ill	Chemical engineer	41.52	290.64
Walter L. Herold	Herold Manufacturing Co., Scranton, Pa	Mechanical engineer	27.04	1,152.28
Melvin S. Newman	Ohio State University, Columbus, Ohio	Chemical engineer	43.44	86.88
John M. Provost	3243 Beacon Hill Ave., Pittsburgh, Pa	Mining engineer	27.04	2,109.12
Walter Cooper	1530 Virginia St., Charleston, W. Va	Chemical engineer	41.52	373.68
Hugh D. Pallister	Box 0, University, Ala	Mining engineer	22.88	91.52
Thomas M. McVay	University of Alabama, Tuscaloosa, Ala	Mineralogist	32.16	209.04
Herbert H. Greger	Route No. 1, Rockville, Md	Ceramic engineer	37.68	6,121.84
Charles E. White	4405 Beechwood Rd., Hyattsville, Md	Chemist	36.92	559.02
Edward Steidle	323 East Hamilton Ave., State College, Pa	Mining engineer	36.92	68.43
John B. Lewis	4817 Erskine Way, Seattle 6, Wash	do	32.15	[1] 7,270.92
Joseph Daniels	University of Washington, Seattle, Wash	do	27.04	270.77
Jesse S. Walton	2023 Monroe St., Corvallis, Oreg	Chemical engineer	32.16	1,282.38
Marvin J. Udy	546 Portage Rd., Niagara Falls, N. Y	Chemical and metallurgical engineer	45.36	45.36
Robert T. Banks, Jr	5303 Wilton Dr., New Orleans, La	Minerals consultant	36.92	3,102.79
Charles T. Holland	Post Office Box 836, Blacksburg, Va	Mining engineer	41.54	1,261.17
Herbert D. Kynor, Sr	219 North Laurel St., Hazleton, Pa	do	41.54	6,434.14
Philip S. Miller	96 Longview St., West Orange, N. J	Civil engineer	41.54	4,398.30
William H. Lesser	1322 Myrtle St., Scranton, Pa	Mechanical engineer	41.54	1,235.52
Henry A. Dierks	831 Charles Ave., Kingston, Pa	Mining engineer	41.54	3,696.18
Roland D. Parks	3 Upland Rd., Lexington 73, Mass	do	32.15	1,471.32
Fred G. Rockwell	Rocklands, R. F. D. No. 4, Lexington, Va	do	32.15	546.56
Oliver Bowles	5000 Massachusetts Ave. NW., Washington 16, D. C	Mining engineer and geologist	36.92	3,736.83
F. Wayles Browne, Jr	8501 Irvington Ave., Bethesda 14, Md	Economist	40.00	2,440.00
Guy E. Diehl	1575 Vermilion Rd., Duluth 5, Minn	Engineer	32.15	88.44
Frank L. Fisher	Houghton, Mich	Metallurgical engineer	32.15	1,672.08
Total			63,527.17	

[1] Employed on full-time basis.

National Park Service, consultants fiscal year 1953 (July 1, 1952, to Mar. 31, 1953)

Name	Address	Profession	Daily rate	Amount paid
McKee, Robert M	Pan American Bldg., Miami, Fla	Appraiser	$43.44	$282.36
Platt, William	101 Park Ave., New York 17, N. Y	Architect	27.04	13.52
Buwalda, John P	California Institute of Technology, Pasadena, Calif	Professor of geology	27.04	81.12
Colby, William E	Mills Building, San Francisco, Calif	Attorney	27.04	81.12
Monteith, John Jr	4852 Hutchins Place, NW., Washington, D. C	Turf specialist	24.00	1,014.00
Olmsted, Frederick L	Care of Olmsted Bros., Brookline, Mass	Landscape architect	27.04	81.12
Total			1,553.24	
Grand total, 1953			154,652.41	

Mr. JENSEN. Off the record.
(Discussion off the record.)

BUREAU OF RECLAMATION

GENERAL INVESTIGATION

Mr. BEASLEY. The next change is on page 73, "General investigations, Bureau of Reclamation," and there is new language appearing at the middle of the page as follows:

For "investigations in connection with the Arkansas, White and Red River Basins survey in the States of Missouri, Arkansas, and Louisiana, not to exceed $100,000 of the amount herein appropriated shall be available exclusively for such purpose."

The purpose of that language is to identify the amount of money that may be used for such investigations, and can be used for that purpose only.

Mr. BUDGE. Now, Mr. Beasley, is not this a fact, that the Bureau in the fiscal year 1953 has already expended funds for this purpose?

Mr. BEASLEY. Yes, sir.

Mr. BUDGE. In other words, we are now being asked to legalize what they did, but they are not sure whether they should have done it, so they want us to write this language in.

Mr. BEASLEY. I think that is a matter of interpretation of the law.

Mr. BUDGE. If they have the right to do it legally, and I assume they must have thought that they did have, or they would not have been doing it in the fiscal year 1953, then why are they asking Congress to tell them that they have that right by this language?

Mr. BEASLEY. I would like to go off the record here.
(Discussion off the record.)

CONSTRUCTION AND REHABILITATION

Mr. BEASLEY. On page 78 there is new language relating to the use of the reclamation fund in financing construction and rehabilitation. It would provide that there shall be derived from the reclamation fund an amount equal to the aggregate of the receipts deposited to said fund during the current fiscal year, and the balance in said fund at the close of the next preceding fiscal year less the amounts to be derived from said fund or other appropriations for the current fiscal year.

I understand when you heard the Bureau of Reclamation you discussed this proposal.

Mr. JENSEN. Yes. You may have some other ideas for changes in this language. Would you inform the committee if you do have?

Mr. BEASLEY. I think it could be greatly simplified by merely providing that the construction and rehabilitation appropriation shall be made from the general fund of the Treasury but there shall be repaid to the general fund of the Treasury the balance remaining in the reclamation fund at the close of the fiscal year. That would completely liquidate the reclamation fund for that particular year, and the receipts in the following year would be handled in the next appropriation act accordingly.

Mr. JENSEN. Would that also take away the possibility of a point of order being made against this language?

Mr. BEASLEY. I think it probably would because there is authority to appropriate the reclamation fund. You are appropriating it back to the general fund to the extent that it is available to assist in the construction of reclamation projects.

Mr. JENSEN. All right. Will you then draft language which you think is proper to put in the bill in lieu of the language herein contained?

Mr. BEASLEY. I would be gald to.

(NOTE.—The language was furnished to the committee.)

Mr. BUDGE. Mr. Chairman, I would like to say that this, again, seems to be a matter which should be handled by a legislative committee. I do not like to start amending the basic law with this kind of language, or the kind we were considering a few minutes ago, in an appropriation bill.

Mr. NORRELL. You are exactly right about that.

Mr. JENSEN. This committee has leaned over backward in trying to keep legislation out of this appropriation bill. At times we have even been criticized for having language in this appropriation bill. I agree with you; there should be no legislation in the appropriation bill; but there are times when we know the legislative committees will not have time to act on matters of this nature where we do put so-called legislation in an appropriation bill. We try to hold that down to limitations in an appropriation bill, rather than legislation. We possibly step over that line occasionally, but not too far.

Mr. NORRELL. We do have a right, of course, to limit expenditure of money or something like that in this committee.

Mr. JENSEN. Yes.

Mr. NORRELL. We can do that without infringing on the legislative committee.

Mr. BUDGE. Yes, but when we extend the area in which the basic law says the Bureau of Reclamation shall operate certainly that is not a limitation. That is an extension of the basic law.

Mr. JENSEN. This language reads:

Of which $49,155,000—

which figure is bracketed out—

there shall be derived from the reclamation fund an amount equal—

as it goes on. That language up to:

Of which there shall be derived from the reclamation fund

is language that has always been carried in this bill. The balance of the language, in italics, could, I presume, be construed as legislation on an appropriation bill, but the section does the same thing that we have been doing all these years. Of course, it extends and expands the amount, I will say, of money which is derived from reclamation funds. But so far as being a departure from regular procedure so to speak, it cannot be put in that category. Would you agree with that, Mr. Beasley?

Mr. BEASLEY. I think you have stated it in the manner in which it is intended to apply. The purpose is to completely utilize the reclamation fund rather than to identify certain projects which are financed from the reclamation fund, with all other projects being financed from

the general fund. Prior to 1951 you will recall there were 2 separate construction appropriations made to the Bureau of Reclamation; 1 out of the general fund—and those projects were identified—and 1 out of the reclamation fund, and those projects under that fund were identified. When we consolidated the construction appropriation, in order to utilize the reclamation fund it was done in the manner Mr. Jensen has explained, but because the projects identified for construction from the reclamation fund did not fully utilize the reclamation fund there has been a feeling that the financing of the construction appropriation should be as much from the reclamation fund as possible.

Mr. JENSEN. Do you have anything further?

Mr. BUDGE. No. I will take a look at it. I do not know enough about the history of it, but I want to check into it.

Mr. JENSEN. Off the record.

(Discussion off the record.)

Mr. BEASLEY. Also, on page 78 are proposed deletions of certain provisos, the first one being the restriction in the 1953 appropriation act on the use of construction and rehabilitation appropriations in connection with preliminary designs of the Southwest Contra Costa County Water District system. The study that was authorized last year will be completed this year.

Mr. JENSEN. Yes.

Mr. BEASLEY. And there is no need for that language, since it was limited to the completion of the report. Of course, construction cannot be undertaken until Congress appropriates.

Mr. NORRELL. The language has served its purpose?

Mr. JENSEN. Yes.

Mr. BEASLEY. The second proviso proposed for deletion is the so-called Keating amendment, having to do with the restriction on the use of the appropriation for the construction of transmission facilities.

Mr. JENSEN. They tried to get that deleted last year, but we did not let them do it.

Mr. BEASLEY. Yes.

Mr. JENSEN. Yes. They are asking that that be deleted?

Mr. BEASLEY. The budget proposes the deletion of it, Mr. Chairman.

Mr. NORRELL. We know what it will do, Mr. Chairman.

(Discussion off the record.)

Mr. BEASLEY. On page 79 the proviso relating to the use of the appropriation in connection with the Glendo unit for the Missouri River Basin project is proposed for deletion. That is a provision that has annually been insisted on by the Senate Committee on Appropriations. This committee has generally deleted it. The purpose of the language is to limit the use of the appropriation for investigations until a definite plan report is completed. It is to prevent the construction of this unit until a definite plan report is completed and approved.

Mr. JENSEN. Do you have that slated for elimination?

Mr. BEASLEY. Yes, sir; we have.

We also propose the deletion of the last proviso appearing on that page, which was the additional appropriation made last year for the completion of the Coachella division of the All-American Canal sys-

tem, Boulder Canyon project. Since there are no funds proposed in the 1954 budget there is no need for that language.

On page 80 the proviso that made $700,000 available in 1953 for emergency rehabilitation of the Savage Rapids Dam is proposed for deletion, inasmuch as that was an appropriation for the complete cost of the project.

Mr. NORRELL. It has served its purpose.

Mr. BEASLEY. Yes.

Mr. JENSEN. All right.

Mr. BEASLEY. The deletion of the proviso appearing near the bottom of page 80 is similar to the one on the Glendo project, but it relates to the Moorhead Dam and Reservoir in Montana. The purpose of that deletion is the same as that stated in connection with Glendo.

There is new language appearing at the bottom of page 80, which would provide that no part of the appropriation may be used for the construction of the Eklutna project in Alaska until there is additional authorization for appropriation.

Mr. JENSEN. That is right.

OPERATION AND MAINTENANCE

Mr. BEASLEY. The next change appears on page 95, and relates to the funds proposed in the operation and maintenance appropriation for the Bureau of Reclamation, for transfer to the Department of Agriculture, which was considered at the time the Bureau of Reclamation budget was examined.

Mr. NORRELL. We discussed that at length.

Mr. JENSEN. Yes, we did. We do not like the item, but I guess there is nothing we can do this year.

Mr. NORRELL. We can turn it down.

(Discussion off the record.)

GENERAL ADMINISTRATIVE EXPENSES

Mr. BEASLEY. The next change appears on page 101, for "General administrative expenses," Bureau of Reclamation, and proposes an increase of $50,000 in the amount that may be available for informational work.

The next item appears on page 107 of the "Administrative provisions" of the Bureau of Reclamation, and proposes the purchase of 250 passenger automobiles for replacement only.

Mr. NORRELL. Does this recommendation stand?

Mr. BEASLEY. Yes, sir. They now have a total of 1,855 automobiles.

There is new aircraft language that would authorize the purchase of one aircraft. They now have eight aircraft.

Mr. NORRELL. Your recommendations stand to the committee?

Mr. JENSEN. So far as the Department is concerned?

Mr. BEASLEY. Yes.

Mr. JENSEN. So far as the committee is concerned without a doubt we will take a good, long, sharp look at that one.

Mr. BEASLEY. I have no doubt as to the truthfulness of that statement.

Mr. NORRELL. All right.

Mr. BEASLEY. I would like to insert in the record at this point statements in justification of the purchase of the automobiles and one aircraft.

Mr. JENSEN. That will be satisfactory.

(The matter referred to follows:)

AUTHORIZATION FOR PURCHASE OF PASSENGER-CARRYING VEHICLES

Request is made to purchase 250 passenger motor vehicles for replacement only. The Bureau will enter fiscal year 1954 with 562 cars over 6 years of age. After making the proposed replacements, 312 cars 6 years or older will have to be operated throughout 1954, all exceeding the replacement standards established by the Bureau of the Budget and General Services Administration.

Experience has proven that 6 years is the maximum economic life that can be realized on Bureau work and in many cases a vehicle cannot be economically maintained that long in Bureau service. Most Bureau cars are required to transport men and equipment used on surveys, construction, and operation and maintenance work over rough terrain, and often over unimproved roads and trails in areas remote from repair facilities or replacement vehicles, throughout the 17 Western States.

Breakdowns on the road which are of frequent occurrence in the continued operation of these overage vehicles are very expensive, not only in the cost of repairs to the vehicle, but also in lost time of work crews and the expense involved in delays to important work on which the personnel is engaged.

Further, due to the frequency of periods when these older cars are broken down and in repair shops, the Bureau is forced to retain in our fleet a larger number of vehicles to provide needed transportation and to spend disproportionate amounts for repairs and replacements.

AUTHORIZATION FOR PURCHASE OF AIRCRAFT

The acquisition of one aircraft requested in fiscal year 1954 is to be used for powerline patrol work in region 6. It is proposed to acquire a Super Piper Cub with tandem landing gear and it is estimated that the aircraft will cost $7,500. The Bureau has no aircraft in its present fleet that could be used for this purpose. Patrol of powerlines with aircraft is an accepted practice and cost of such patrol work can be substantially reduced by this means of transportation. The aircraft is intended for use in patrol of 3,294 miles of line during fiscal year 1954, increasing to over 4,000 miles within succeeding 2 years. Lines include Missouri River Basin, Fort Peck, and integrated projects.

Mr. BEASLEY. The next change is the proposed increase of $50,000 in the amount which may be expended for the employment of consultants.

Mr. JENSEN. All right.

Mr. BEASLEY. The next change is the proposed deletion of the words "including such services" and this is unnecessary language, as was explained in the case of the Bonneville Power Administration.

It is also proposed to delete the requirement that the Secretary of Interior would have to authorize the employment of consultants.

Mr. NORRELL. Why is that?

Mr. BEASLEY. This would leave it up to the Commissioner of Reclamation to approve the employment of consultants, if this language were deleted.

Mr. NORRELL. Is that the recommendation of the present Secretary?

Mr. BEASLEY. It would not be under existing requirements, which provide that the Secretary must approve all appointments in the Department.

Mr. NORRELL. All right.

Mr. BEASLEY. The next change appears on page 109, and would delete the paragraph that authorizes the Bureau of Reclamation to acquire without reimbursement parts, equipment, and supplies for aircraft excessive to the needs of any other Government agency. This language is not needed, since the General Services Administrator is empowered by law to authorize this if he determines it to be necessary.

Mr. NORRELL. You mean the General Services Administrator can make an authorization that the Interior Department should acquire 20 or 30 or 40 of whatever he wanted to?

Mr. BEASLEY. This is only for parts and equipment and supplies.

Mr. NORRELL. He could authorize any quantity of parts? You might have 10 airplanes, and he could authorize any quantity of parts he wants to under existing law.

Mr. BEASLEY. Yes, sir.

Mr. NORRELL. I did not know that. All right.

Mr. BEASLEY. He can also establish the amount of reimbursability for those parts, too.

The next change appears on page 110 and is for the purpose of changing the language relating to the limitation on the amount of the appropriation that may be expended for force account work.

Mr. NORRELL. If that were adopted what would be the result?

Mr. BEASLEY. It would remove the limitation of $225,000 which now exists with respect to force account work on any project.

Mr. NORRELL. He could spend any amount he had in money to spend, which was appropriated and authorized?

Mr. BEASLEY. Except that we would still be subject to the 12-percent limitation in the overall appropriation.

Mr. JENSEN. We considered that matter at length both in this committee, in the Senate committee, and in conference. This language was finally agreed to by the conferees. I see no reason why language which is bracketed out, which reads:

> except that not to exceed $225,000 may, on approval of the Commissioner, be expended for construction work by force account on any one project in the Missouri Basin unit, when the work is unsuitable for contract or when excessive bids are received.

should not be in. Can you point out any instance where that limitation has proved detrimental to the operation of the construction program in the Missouri Valley?

Mr. BEASLEY. I know of no instance, Mr. Chairman. I think, though, that I should check to find out if they can produce evidence that there has been an instance where this limitation has been disadvantageous to the Government.

Mr. JENSEN. All right. If that can be proved then the committee will consider the deletion of this language. You will inform us of your findings.

Mr. BEASLEY. I will insert that information in the record, as to whether or not there is any evidence of that.

(The matter referred to follows:)

STATEMENT ON FORCE ACCOUNT

The following are instances where the Bureau has experienced difficulties by the present force-account language, which virtually restricts the performance of all work to contract methods.

Confusion is caused by the practical application of the restriction especially on projects where only minor completion work remains to be done with funds from prior appropriations and the restriction is upon the funds rather than upon the construction program.

On the Shoshone project drainage work was required to be performed at various spots in the area as the need for drainage developed. Such scattered work was not attractive to contractors and it was difficult and costly to prepare precise specifications. Contract administration on this type of work is out of proportion to the value of the contract administered.

A recent instance where force-account construction would have been advantageous was for the installation of control and telemetering equipment on the Colorado-Big Thompson project. This work covered the installation of equipment at three separate locations; it was required that the employees work in high-voltage substations; that it be performed at odd times when interruption of service would cause minimum interference. Special tools and training for the personnel were required for the work. It would have been advantageous and economical to have this equipment installed by Bureau employees in order to train them by the installation of the equipment which they would later operate and to retain for maintenance purposes those special tools and equipment required therefor.

Mr. BEASLEY. I would also like to insert in the record a statement in explanation of this proposed change.

(The matter referred to follows:)

BUREAU OF RECLAMATION

ADMINISTRATIVE PROVISIONS

Revision of language pertaining to the limitation on force account

The Bureau of Reclamation is now operating under a limitation in the Appropriation Act for fiscal year 1953 which provides that: "Not to exceed 12 percent of the construction allotments made by the Bureau of Reclamation for any project from the appropriation 'Construction and rehabilitation' contained in this act shall be available for construction work by force account or on a hired-labor basis; except that not to exceed $225,000, may on approval of the Commissioner be expended for construction work by force account on any one project or Missouri Basin unit when the work is unsuitable for contract or when excessive bids are received; and except in case of emergencies, local in character, so declared by the Commissioner."

The Bureau of Reclamation for many years has followed the policy of contracting as much of its work as feasible and experience has shown that the percentage of work performed by force account is much less than the 12-percent limitation. However, on projects that are being prepared for major construction or are nearing completion, minor work not adaptable to contract needs to be performed. On many smaller projects the work is minor, intermittent in nature, or in isolated areas, is uneconomical to do by contract and is not attractive to contractors. Requirements for drainage of irrigated land appear during the irrigating season and the work must be done immediately to prevent crop loss. It takes a minimum of 60 days to get a contractor on the job after the need for drainage is observed and this is too late to be of any benefit during the current year. These conditions generally prevail on projects where the allotments are small and it is difficult to keep the force-account work within the 12-percent limitation.

It is recommended that the limitation be made applicable to the total appropriation to the Bureau of Reclamation for construction and rehabilitation and that the provision be deleted that makes it applicable to the construction allotments made tor any one project or Missouri Basin unit.

Removal of these additional restrctions and conditions will not alter the objective of the limitation and will permit the Bureau to administer the program more efficiently at less cost and with more satisfactory results.

Geological Survey

Mr. Beasley. The next change is on page 120 and relates to the authorization for the purchase of automobiles by the Geological Survey. The budget proposes the purchase of 146 automobiles, of which 118 shall be for replacement only. That has been revised to provide for 119 automobiles, of which 109 will be for replacement only.

Mr. Jensen. We will go to the next change.

Bureau of Mines

CONSTRUCTION

Mr. Beasley. The next change is on page 130, under "Construction, Bureau of Mines," and proposes the deletion of the language which appropriated in the 1953 act an amount for liquidation of contractual expenditures. Inasmuch as this contractual authority has been completely liquidated by the 1953 appropriation, the language is no longer necessary.

Mr. Norrell. How many automobiles does the Geological Survey have at this time?

Mr. Beasley. 681.

Mr. Jensen. I will venture that if any department of Government needs automobiles, or needs a lot of automobiles, the Geological Survey is one of those agencies, but it does seem like an awful lot of automobiles.

Mr. Beasley. Most of the automobiles in the Geological Survey are used on the water-resources investigations where they are visiting the stream-gaging stations.

Mr. Jensen. And they operate all over the United States, even in the very outermost recesses of the country, and I can see where they would need automobiles, and a lot of them, but that does seem like an awful lot of them.

Well, we will take a good look at it.

Mr. Beasley. I would like to insert at this point a statement in justification of the purchase of the passenger-carrying vehicles.

(The matter referred to is as follows:)

Authorization for Purchase of Passenger-Carrying Vehicles

One hundred and nine automobiles of the 119 are for replacement of wornout and unserviceable vehicles, all of which will be at least 6 years old or have been driven more than 60,000 miles at the time of trade-in. Ten additional cars will be needed in connection with the expanded programs in topographic mapping, geologic and water-resources investigations, land classification, and mineral-lease supervision.

ADMINISTRATIVE PROVISIONS

Mr. Beasley. The next change appears on page 135, "Administrative provisions, the Bureau of Mines." The language in the budget provides for the purchase of 98 automobiles, of which 84 shall be for replacement only. That has been revised to provide for the purchase of 87 automobiles, of which 84 shall be for replacement only, and would provide authority for the purchase of only 3 new automobiles to be added to the fleet.

Mr. JENSEN. How many automobiles does the Bureau of Mines have in operation at the present time?

Mr. BEASLEY. 679, and most of their automobiles are used in the inspection work on the health and safety program, going from mine to mine.

(Discussion off the record.)

Mr. BEASLEY. I would like to insert in the record at this point a statement in justification of the purchase of the three additional automobiles.

(The matter referred to is as follows:)

Ferrous metals and alloys 2

(Due to expanded national requirements for iron, manganese, and ferro-alloy metals in general, the Bureau of Mines will be called upon to make many additional examinations of deposits containing these metals in areas not serviced by public conveyances. All of these metals are essential to steel production and to national defense. Authorization is requested for the purchase of two additional automobiles for this work.)

Rare and precious metals 1

(An additional passenger vehicle will be required in fiscal year 1954 for use in the field work involved in the examination of placers containing columbium-tantalum minerals.)

Mr. JENSEN. We will now go to the next change.

NATIONAL PARK SERVICE

MAINTENANCE AND REHABILITATION OF PHYSICAL FACILITIES

Mr. BEASLEY. The next change appears on page 142 of the bill for the item "Maintenance and rehabilitation of physical facilities, the National Park Service." It provides for new language, as follows:

Including furnishing special road-maintenance service to defense-trucking permittees on a reimbursable basis.

The purpose of this language is to enable the National Park Service to use its funds and to get reimbursement for special maintenance work on the roads where truckers are using them on defense work. It has to do, primarily, with the Big Bend National Park in Texas, where minerals are being trucked over park roads.

I would like to insert at this point a justification statement for this change.

(The matter referred to follows:)

The new language is proposed for addition to this appropriation item as shown in the italic portion which follows:

"For expenses necessary for the operation, maintenance, and rehabilitation of roads (*including furnishing special road maintenance service to defense trucking permittees on a reimbursable basis*) * * *".

An emergency situation has confronted the Service with respect to providing special road maintenance service to defense trucking permittees in Big Bend National Park, Texas. Permits have been issued to allow the heavy trucking of ores through that Park for defense purposes. The weight, size, and capacity of the trucks being used is far beyond that for which the park road system was designed and the resulting additional cost for maintenance is excessive to the degree that it cannot be absorbed. If continued hauling was permitted without adequate maintenance, it could only result in the necessity of reconstructing the roads at Government expense. Arrangements have been made with the Bureau of Public Roads, the Defense Materials Procurement Agency, and the Service whereby $100,000 is to be provided the Bureau of Public Roads for rehabilitating and strengthening the roads. Estimated costs of maintenance on an annual basis total $75,000. A charge of 2 cents per ton-mile for material hauled has been

established, the permittees to reimburse the Service at this rate so that maintenance of roads can be assured.

The matter was taken up with the Comptroller General by letter of June 9, 1952, and his reply of June 24, 1952 (B–110137), stated that the General Accounting Office would not object to this arrangement pending the consideration of the matter by the Congress.

Mr. JENSEN. We will go to the next item.

CONSTRUCTION

Mr. BEASLEY. The next change appears on page 145, and proposes the deletion of language, as indicated on that page.

Mr. NORRELL. What does that do now?

Mr. BEASLEY. This was a supplemental appropriation item that had this language in it and it is not appropriate to be considered in the regular appropriation bill.

Mr. JENSEN. We will go to the next change.

Mr. BEASLEY. The next change appears on page 149, National Park Service. This new language would provide for the liquidation of obligations incurred, pursuant to authority contained in section 4 (b) of tne Federal-Aid Highway Act of 1952, $1,500,000. That was contractual authority granted in the Federal-Aid Highway Act for the Washington-Baltimore Parkway.

Mr. JENSEN. We will go to the next change.

ADMINISTRATIVE PROVISIONS

Mr. BEASLEY. The next change appears on page 152, "Administrative provisions, National Park Service," and relates to the purchase of automobiles. The budget proposed the purchase of 57 automobiles, of which 49 shall be for replacement only. The revised estimate would be the purchase of 55 automobiles, of which 49 shall be for replacement only, an increase of 6 to the fleet, rather than 8, as proposed in the budget.

I would like to insert at this point a statement in justification of the purchase of the automobiles:

(The matter referred to follows:)

AUTHORIZATION FOR PURCHASE OF PASSENGER MOTOR VEHICLES

The general provisions relating to appropriations for the National Park Service provide for the purchase of 55 passenger motor vehicles, of which 49 are for replacement and 6 are additional vehicles. The six additional vehicles are for use as follows:

Two for police patrol duties on the new Baltimore-Washington Parkway; 1 for the Virgin Islands National Historic Site, the responsibility for the management and maintenance of which was recently delegated to the Service; 1 each for Dinosaur and Fort Laramie National Monuments for general management and protection of the 2 areas. No passenger motor vehicle is now available at Fort Laramie, Wyo., and the terrain in Dinosaur, Utah, is such that it is proposed to acquire a 4-wheel vehicle for back country patrol. One of the vehicles is for use of survey crews engaged in studies of river basins.

A survey just recently completed shows that all of the 49 vehicles proposed for replacement during the estimate year will be well within the established standards (6 years old, or 60,000 miles) established by the Government for the replacement of passenger motor vehicles. Of the 49 vehicles, 37 range in age from 6 to 8 years with mileages from 60,000 to 150,000.

Mr. JENSEN. We will turn to the next change.

Fish and Wildlife Service

INVESTIGATIONS OF RESOURCES

Mr. Beasley. The next change appears on page 160, "Investigations of resources, Fish and Wildlife Service," and the new language appearing in the first line of that item is, as follows: "Not otherwise provided for." The reason for this language change is the proposed new item under the Office of the Secretary for the research item that was discussed earlier.

Mr. Jensen. You mean the $260,000 research item?

Mr. Beasley. If that item were approved, this language would be necessary in order not to be in conflict with another item.

Mr. Jensen. What would be the situation if the committee does not approve that item?

Mr. Beasley. This language would not be necessary.

Mr. Jensen. But the words, "not otherwise provided for" in line 1 are not necessary.

Mr. Beasley. No, sir.

Mr. Jensen. We will turn to the next change.

CONSTRUCTION

Mr. Beasley. Page 164, "Construction, Fish and Wildlife Service," proposes the deletion of language, as follows:

including continuing the construction of fish cultural facilities on lands owned by the State of South Dakota.

This work is expected to be completed this year and there is no need for the language that would authorize further expenditures.

Mr. Jensen. We will turn to the next item.

ADMINISTRATIVE PROVISIONS

Mr. Beasley. The next change is on page 171, "Administrative provisions, Fish and Wildlife Service," the first change being the language in the budget that would authorize the purchase of 156 passenger automobiles, of which 122 shall be for replacement only. The revised estimate would provide for the purchase of 138 automobiles, of which 107 shall be for replacement only. The Fish and Wildlife Service now has a total of 487 automobiles.

Mr. Jensen. We now come to the aircraft question. Let us talk about that a moment. All of these aircraft are in Alaska, are they not?

Mr. Beasley. Not all of them, Mr. Chairman. Most of them are in Alaska, but they do have a few in the States that are used in the enforcement of the migratory bird laws and for making water fowl surveys.

Mr. Jensen. How many aircraft does the Fish and Wildlife Service have?

Mr. Beasley. 46.

Mr. Jensen. And they are asking to purchase not to exceed 7 aircraft, of which 6 shall be for replacement only?

Mr. BEASLEY. Yes, sir.

Mr. JENSEN. But they already have 46?

Mr. BEASLEY. Yes, sir.

Mr. JENSEN. Well, I think they are going to have to get along with 46, if I have my way.

We will go to the next item.

OFFICE OF TERRITORIES

ADMINISTRATION OF TERRITORIES

Mr. BEASLEY. The next change appears on page 173, "Administration of Territories, Office of Territories," and the new language in the second line is for the departmental administration of——

Mr. JENSEN. What is the purpose of that?

Mr. BEASLEY. That would authorize this appropriation to be available for departmental administration of trust territories, and would be necessary, since the trust territories item is set up in a new item. It is a correcting language provision.

The second change is also on that page, and authorized the purchase of one passenger motor vehicle, not to exceed $3,500, for replacement only. This would be the replacement of an automobile for the Governor of Alaska.

Mr. NORRELL. We know what that is for. We can get to it at the proper time.

Mr. JENSEN. We will turn to the next item.

TRUST TERRITORY OF THE PACIFIC ISLANDS

Mr. BEASLEY. The next change appears on pages 177, 178, and 179.

Mr. NORRELL. What does that do?

Mr. BEASLEY. The first change is a correcting provision, since the appropriation appears in this item, rather than another item, as it did last year.

The second change appears on page 178.

Mr. JENSEN. Tell us briefly what that would do.

Mr. BEASLEY. It is a proposed deletion of language in the proviso appearing on that page, beginning with the reserve for Navy subsidies and continuing through the page and the first line on page 179. That relates to language inserted in the 1953 appropriation act relating to the corporation of the trust territory.

Mr. JENSEN. That is the Island Trading Co.

Mr. NORRELL. What would that do if you leave it out?

Mr. BEASLEY. The language you put in last year limited the life of this corporation to December 31, 1953.

Mr. NORRELL. And it is now being liquidated?

Mr. BEASLEY. It is now being liquidated and the language is no longer necessary to accomplish the purpose of the language. There is new language on page 179 that would make available the funds remaining after the assets of the corporation have been returned to the Treasury.

Mr. JENSN. That is necessary language.

Mr. BEASLEY. Yes, sir.

CONSTRUCTION OF ROADS, ALASKA

Mr. BEASLEY. Page 185 is the deletion of language inserted last year for the purchase of automobiles for the Commissioner of Roads in Alaska. There is no request for any automobiles to be purchased in the 1954 budget.

TRUST TERRITORY OF THE PACIFIC ISLANDS

Mr. NORRELL. Mr. Chairman, may we just stop at this point and go back to the new language on page 179?

Mr. JENSEN. Yes, sir.

Mr. NORRELL. I am afraid we are overlooking an item there.

Does this provide something about transportation on the islands?

Mr. BEASLEY. No, sir; not transportation as much as it provides authority for the Secretary to use any balance remaining.

Mr. NORRELL. Down after "1953," on the fifth line from the bottom.

Mr. BEASLEY. Yes; I understand the language you are referring to.

Mr. NORRELL. What does that language do?

Mr. BEASLEY. It would authorize the Secretary of the Interior to use any balance remaining after liquidation of the corporation, for loans to trading companies in the trust territory, in order that businesses could be started, which would be necessary if the trading company pulled out. There needs to be some means by which you can finance private enterprise.

Mr. NORRELL. We are starting something here, though, that will be pyramided, will it not, into millions of dollars in the future?

Mr. BEASLEY. No, sir; it would not get into any sum of that magnitude. When this language was first considered I thought that there should be a time by which the money should be returned to the Treasury, and that certainly would be taken into consideration when the loans are made, on such terms as may be determined by the Secretary to be necessary to insure continuation of local commerce. The Secretary, in making the loans, could have a repayment period.

Mr. NORRELL. Does it give the Secretary any additional new authority?

Mr. BEASLEY. Yes, it does.

Mr. NORRELL. What is it?

Mr. BEASLEY. To loan money.

Mr. NORRELL. That is all.

ALASKA RAILROAD REVOLVING FUND

Mr. BEASLEY. The next change is on page 193.

Mr. JENSEN. What is that?

Mr. BEASLEY. That is language that would propose an increase in the salary of the Assistant General Manager of the Alaska Railroad, and also increase the maximum amount that could be paid any other employees of the Alaska Railroad.

Mr. NORRELL. It would give him $14,000 in the place of $13,000?

Mr. BEASLEY. Yes, sir; and would place a limitation of $12,000 on any other employees.

(Discussion off the record.)

Mr. JENSEN. We will turn to the next change.

VIRGIN ISLANDS PUBLIC WORKS

Mr. BEASLEY. The next change appears on page 201, "Virgin Islands public works." There are two changes: The first is the deletion of language for the liquidation of contractual obligations. This language is no longer necessary. The next change is inclusion of new language that would authorize the purchase of one motor vehicle for replacement only.

Mr. NORRELL. Is that for the Governor?

Mr. BEASLEY. No, sir. That is for the public-works program.

ADMINISTRATION, DEPARTMENT OF THE INTERIOR

SALARIES AND EXPENSES

Mr. BEASLEY. The next change appears on page 205, and is "Administration, Department of the Interior." The change there is the purchase of an automobile, not to exceed $4,500. This language could be deleted, inasmuch as the funds have been eliminated from the budget estimate and there will be no automobile purchased.

Mr. NORRELL. I wish you would express my congratulations to the Secretary.

Mr. JENSEN. And mine too.

Mr. NORRELL. He will not have much trouble with me when he starts out on that line.

GENERAL PROVISIONS, DEPARTMENT OF THE INTERIOR

Mr. BEASLEY. The next change is on page 210, section 107. There is an insertion of new language, as follows: "purchase of reprints." The Department had this authority for years, but it was deleted 2 years ago by the Bureau of the Budget, under the contention that the language was not necessary. The question arose as to the purpose of its deletion and necessity and we find that that language is necessary and we are asking that it be reincorporated in the language.

We propose the deletion of section 108, which was permanent language included in last year's appropriation, and is no longer required.

We also propose the deletion of section 109, which restricts the availability of appropriations for the employment of chauffeurs.

Mr. NORRELL. Has that worked an inconvenience down there? Why do you want to do away with that?

Mr. BEASLEY. My attention has been called to the fact that the Independent Offices' budget carries a provision with respect to the employment of chauffeurs.

Mr. JENSEN. What are the provisions of that bill?

Mr. BEASLEY. It would authorize a chauffeur for the Secretary of the Interior and the Under Secretary, as is done by this provision. So, the deletion of this section 109 and the incorporation in the new section in the Independent Offices Appropriation Act would leave us just as we are today.

The next change is the proposed deletion of section 110, which was a permanent provision and is no longer applicable.

Virgin Islands Corporation

The next change is on page 215. It makes available funds appropriated to cover prior year losses.

Federal Coal Mine Safety Board of Review

The next change appears on page 225, and is a new item for the Federal Coal Mine Safety Board of Review. Inasmuch as that is not a Department of the Interior item, I have no statement to make.

Title IV—General Provisions

The next change is on page 227, and is merely a change in the number of a general provision—section number of a general provision.

The next change is on page 228 and is the proposed deletion of section 402 and also the deletion of section 403, which are the so-called Jensen amendments.

Mr. Jensen. I may say that this language is not necessary this year, at least, because of the fact that the President has issued orders to the effect that no vacancies may be filled except in cases where it is absolutely necessary. So, the President has gone even one step further than my amendment went and, hence, it makes this section in the bill unnecessary.

Mr. Beasley. I might make a correction here. I referred to sections 402 and 403, as the Jensen amendment. Section 402 is the limitation on the use of appropriations for informational purposes.

Mr. Norrell. Does that stand?

Mr. Beasley. We propose the deletion of it.

(Discussion off the record.)

Mr. Beasley. I would like to state that in 1952 there was a reduction of 25 percent in the amounts included in the budget for informational purposes and in 1953 there was a 90-percent limitation. So, there have been 2 successive years in which there have been reductions.

Mr. Norrell. How much is in your budget this year for informational purposes? In other words, to carry out the total program that this section deals with?

Mr. Beasley. We do not have that amount. I will have to get that for the record, Congressman Norrell.

(The matter referred to follows:)

Statement of funds for informational purposes for activities covered by section 402

	Appropriated 1953 for activities under section 402	Estimate, 1954
Southeastern Power Administration		
Southwestern Power Administration	$16,000	$16,000
Bonneville Power Administration	38,830	38,010
Commission of Fine Arts		
Bureau of Land Management	22,891	27,450
Bureau of Indian Affairs	35,085	35,085
Bureau of Reclamation	[1] 251,373	[1] 280,000
Geological Survey	14,962	16,750
Bureau of Mines	65,615	58,540
National Park Service		
Fish and Wildlife Service	8,530	8,973
Office of Territories		
Administration, Department of the Interior	50,272	51,335
Total	503,558	532,143

[1] Includes component part of personal services included in limitation of $150,000 under "General Administrative Expense" appropriation.

Mr. NORRELL. If we deleted this, the trend would be to spend a greater amount, of course, in the future than you have in the past?

Mr. BEASLEY. I might say that the attitude of the present Secretary of the Interior is certainly not to increase expenditures for this purpose.

Mr. NORRELL. Why would it be necessary to delete this item?

Mr. BEASLEY. It would be a further reduction if this item were to stand.

Mr. NORRELL. That is the reason I think, maybe, it ought to stand.

Mr. JENSEN. I am of the same opinion. I see no good purpose in deleting the item.

Mr. BEASLEY. That concludes the changes.

OFFICE OF TERRITORIES

ALASKA ROADS COMMISSION

Mr. NORRELL. Mr. Chairman, there was one change that I remember some witness testified that he would like to have and I have reference to an item that someone testified to about the force account in Alaska. They wanted it limited to about 12 percent, or what it is in the States. Do you remember that discussion?

Mr. JENSEN. Yes, sir.

Mr. NORRELL. Do you have any comment on that, Mr. Beasley?

Mr. BEASLEY. That comes under the Commissioner of Roads in Alaska, I think.

Mr. NORRELL. Yes, that is right.

Mr. JENSEN. The representative of the General Contractors of America made that request before the committee recently.

Mr. BEASLEY. The present limitation is 20 percent.

Mr. NORRELL. He wants it to be 12 percent.

Mr. BEASLEY. Yes, sir.

Mr. JENSEN. As it is on the mainland.

Mr. BEASLEY. I will tell you why this is 20 percent in the case of roads in Alaska, as contrasted to 12 percent for Bonneville Power Administration and Reclamation. It is due to the lack of interest on the part of contractors to construct roads into a new area, and where they are not familiar with the permanent frost conditions.

Mr. JENSEN. I may say, however, there are a lot of contracting concerns that are bidding on such construction in Alaska; many more than there have been, even up to 5 years ago. So, the 20 percent may be a little out of order at the present time. The committee will take it under advisement.

Mr. NORRELL. You have no comment?

Mr. BEASLEY. No, sir.

(Discussion off the record.)

ECONOMISTS

Mr. JENSEN. Mr. Beasley, I have a statement from our investigators who are employed by the Appropriations Committee, which sets out the number of economists in each agency of the Interior Department, and I note the total number is 236 at the present time and their annual salary is $1,500,252.

It would appear that 236 economists might be a lot more than is necessary.

I shall simply turn this list over to you and ask that you make a survey of your own to determine the need for all of these economists, and I am of the opinion that you will discover that 236 economists in the Interior Department is a big overload of people doing that kind of work.

I am turning this over to you, for your information, in the hope that you will show this to Secretary McKay, who I know is just as anxious to save money as we are and to see if a rather substantial savings cannot be effected in this regard.

Mr. BEASLEY. I will be glad to examine the matter, Mr. Chairman.

REVISED BUDGET FOR 1954

Mr. JENSEN. Will you insert in the record a complete table showing the revised budget for 1954?

Mr. BEASLEY. I have a statement here that I will insert in the record that is complete, with the exception of the Bureau of Reclamation, for which the final, revised budget amounts are not yet available.

(The matter referred to follows:)

Department of the Interior, summary of 1953 appropriations compared with 1954 original and revised estimates by activities

	Appropriation, 1953 (adjusted)	Original estimate, 1954	Revised estimate, 1954	Reduction	Increase (+) or decrease (−), revised estimate, 1954 compared with appropriation, 1953, adjusted
OFFICE OF THE SECRETARY					
Enforcement of Connally Hot Oil Act:					
1. Enforcement of Connally Hot Oil Act	$187,000	$187,000	$175,000	$12,000	−$12,000
SOUTHEASTERN POWER ADMINISTRATION					
Construction:					
1. Construction in progress	844,500				−844,500
2. New construction and additions	115,000	6,700,000	100,000	6,600,000	−15,000
Total, construction	959,500	6,700,000	100,000	6,600,000	−859,500
Operation and maintenance:					
1. System operation and maintenance	51,200	100,000	75,000	25,000	+23,800
2. Power marketing	113,500	150,000	150,000		+36,500
3. Purchase of power and rental facilities	495,000	1,390,000	1,250,000	140,000	+755,000
4. General administration	100,300	100,000	100,000		−300
Total, operation and maintenance	760,000	1,740,000	1,575,000	165,000	+815,000
Total, Southeastern Power Administration	1,719,500	8,440,000	1,675,000	6,765,000	−44,500
SOUTHWESTERN POWER ADMINISTRATION					
Construction:					
1. Construction in progress	962,000	385,000		385,000	−962,000
2. New construction and additions	1,735,000	1,115,000		1,115,000	−1,735,000
Total, construction	2,697,000	1,500,000		1,500,000	−2,697,000
Construction (liquidation of contract authorization)	1,130,000				−1,130,000
Operation and maintenance:					
1. System operation and maintenance	965,000	1,105,000	995,000	110,000	+30,000
2. Power marketing	86,380	95,000	85,000	10,000	−1,380
3. General administration	721,620	700,000	620,000	80,000	−101,620
Total, operation and maintenance	1,773,000	1,900,000	1,700,000	200,000	−73,000
Total, Southwestern Power Administration	5,600,000	3,400,000	1,700,000	1,700,000	−3,900,000
Research in the utilization of saline water:					
1. Departmental activities:					
Research coordination and administration	44,000	65,000	65,000		+21,000
Evaluation of research and processes	25,000	35,000	35,000		+10,000
2. Nondepartmental activities: Research and evaluation of processes (consultants, contracts, and grants)	106,000	300,000	300,000		+194,000
Total, research in the utilization of saline water	175,000	400,000	400,000		+225,000
Fishery research:					
1. Research on fish and fisheries		260,000	260,000		+260,000
Emergency flood and storm repairs:					
1. Bureau of Indian Affairs	125,500				−125,500
2. Bureau of Reclamation	745,000				−745,000
3. Geological Survey	50,000				−50,000
4. Fish and Wildlife Service	429,500				−429,500
Total, emergency flood and storm repairs	1,350,000				−1,350,000
COMMISSION OF FINE ARTS					
Salaries and expenses:					
1. Commission of Fine Arts	21,200	26,400	26,400		+5,200

Department of the Interior, summary of 1953 appropriations compared with 1954 original and revised estimates by activities—Continued

	Appropriation, 1953 (adjusted)	Original estimate, 1954	Revised estimate, 1954	Reduction	Increase (+) or decrease (−), revised estimate, 1954 compared with appropriation, 1953, adjusted
BONNEVILLE POWER ADMINISTRATION					
Construction:					
1. Construction in progress	$41,197,000	$38,982,000	$33,159,000	$5,823,000	−$8,038,000
2. New construction	19,000,000	14,218,000	12,241,000	1,977,000	−6,759,000
3. General plant	2,230,000	2,000,000	1,800,000	200,000	−430,000
Total, construction	62,427,000	55,200,000	47,200,000	8,000,000	−15,227,000
Construction (liquidation of contract authorization)	4,096,400				−4,096,400
Operation and maintenance:					
1. Maintenance of transmission system	2,768,590	3,082,186	2,917,754	164,432	+149,164
2. Operation of transmission system	1,954,202	2,289,408	2,245,977	43,431	+291,775
3. Power marketing	700,135	777,269	749,912	27,357	+49,777
4. General administration	1,177,073	1,251,137	1,186,357	64,780	+9,284
Total, operation and maintenance	6,600,000	7,400,000	7,100,000	300,000	+500,000
Total, Bonneville Power Administration	73,123,400	62,600,000	54,300,000	8,300,000	−18,823,400
BUREAU OF LAND MANAGEMENT					
Management of lands and resources:					
1. Lease and disposal of mineral resources	618,000	750,000	750,000		+132,000
2. Land use and disposal	1,212,000	1,911,000	1,411,000	500,000	+199,000
3. Management of grazing lands	1,580,000	1,610,000	1,610,000		+30,000
4. Forestry	2,405,000	2,750,000	2,700,000	50,000	+295,000
5. Cadastral survey	963,000	1,000,000	962,000	38,000	−1,000
6. Soil and moisture conservation	1,454,000	2,000,000	1,450,000	550,000	−4,000
7. Squaw Butter Experiment Station	35,000	45,000	38,000	7,000	+3,000
8. Fire suppression	210,000	250,000	250,000		+40,000
9. Maintenance of physical facilities	25,000	25,000	25,000		
10. Weed control	1,345,000	1,344,000	1,300,000	44,000	−45,000
11. General administration	1,210,000	1,300,000	1,250,000	50,000	+40,000
Total, management of lands and resources	11,060,000	12,985,000	11,746,000	1,239,000	+686,000
Construction:					
1. Access roads	2,750,000	2,000,000	2,000,000		−750,000
2. Buildings in Alaska		100,000		100,000	
Total, construction	2,750,000	2,100,000	2,000,000	100,000	−750,000
Total, Bureau of Land Management	13,810,000	15,085,000	13,746,000	1,339,000	−64,000
BUREAU OF INDIAN AFFAIRS					
Health, education and welfare services:					
1. Hospitals, disease preventive and curative services	21,444,765	22,499,080	21,400,000	1,099,080	−44,765
2. Educational assistance, facilities and services	26,010,660	26,875,000	26,650,000	225,000	+639,340
3. Welfare and guidance services	3,412,315	3,599,180	3,440,000	159,180	+27,685
4. Placement services	579,600	4,250,000	579,600	3,670,400	
5. Maintaining law and order	353,660	353,660	353,400	260	−260
Total, health, education and welfare services	51,801,000	57,576,920	52,423,000	5,153,920	+622,000
Resources management:					
1. Forest and range lands	2,176,119	2,550,000	2,500,000	50,000	+323,881
2. Fire suppression	140,000	140,000	140,000		
3. Agricultural and industrial assistance	1,838,982	2,119,080	1,950,000	169,080	+111,018
4. Soil and moisture conservation	2,421,672	3,200,000	3,200,000		+778,328
5. Operation, repair, and maintenance of Indian irrigation systems	854,000	854,000	854,000		
6. Repair and maintenance of roads and trails	2,270,000	2,646,000	2,446,000	200,000	+176,000
7. Development of Indian arts and crafts	44,513	45,000	45,000		+487

Department of the Interior, summary of 1953 appropriations compared with 1954 original and revised estimates by activities—Continued

	Appropriation, 1953 (adjusted)	Original estimate, 1954	Revised estimate, 1954	Reduction	Increase (+) or decrease (−), revised estimate, 1954 compared with appropriation, 1953, adjusted
BUREAU OF INDIAN AFFAIRS—continued					
Resources management—Continued					
8. Management of Indian trust property	$1,346,100	$2,000,000	$1,800,000	$200,000	+$453,900
9. Repair and maintenance of buildings and utilities	1,862,374	2,650,000	2,300,000	350,000	+437,626
10. Weed control	300,000	300,000	300,000		
Total, resources management	13,253,760	16,504,080	15,535,000	969,080	+2,281,240
Construction:					
1. Buildings and utilities	6,934,000	12,428,000	8,369,000	4,059,000	+1,435,000
2. Roads and trails	4,246,000	4,500,000	4,000,000	500,000	−246,000
3. Irrigation systems	4,940,000	3,941,000	3,500,000	441,000	−1,440,000
4. Land acquisition					
Total, construction	16,120,000	20,869,000	15,869,000	5,000,000	−251,000
Construction (liquidation of contract authorization)	1,380,000				−1,380,000
General administrative expenses:					
1. Departmental office	800,000	860,000	860,000		+60,000
2. Field offices	2,725,647	3,540,000	2,890,000	650,000	+164,353
Total, general administrative expenses	3,525,647	4,400,000	3,750,000	650,000	+224,353
Revolving fund for loans	1,000,000	1,000,000		1,000,000	−1,000,000
Total, Bureau of Indian Affairs	87,080,407	100,350,000	87,577,000	12,773,000	+496,593
GEOLOGICAL SURVEY					
Surveys, investigations, and research:					
1. Topographic surveys and mapping	11,396,585	14,950,000	13,000,000	1,950,000	+1,603,415
2. Geologic and mineral resource surveys and mapping	5,810,000	6,750,000	6,000,000	750,000	+190,000
3. Water resources investigations	6,187,000	6,960,000	6,500,000	460,000	+313,000
4. Soil and moisture conservation	43,700	100,000	45,000	55,000	+1,300
5. Classification of lands	369,000	410,000	375,000	35,000	+15,000
6. Supervision of mining and oil and gas leases	1,080,000	1,200,000	1,150,000	50,000	+70,000
7. General administration	575,400	700,000	600,000	20,000	+194,600
Total, geological survey	25,362,685	31,070,000	27,750,000	3,320,000	+2,387,315
BUREAU OF MINES					
Conservation and development o mineral resources:					
1. Fuels:					
(a) Coal	2,109,628	2,472,558	2,050,000	422,558	−59,628
(b) Petroleum and natural gas	1,343,356	1,518,356	1,343,300	175,056	−56
(c) Synthetic liquid fuels	7,630,304	7,905,304	5,905,000	2,000,304	−1,725,304
(d) Helium	90,795	90,795	90,800	+5	+5
2. Minerals and metals:					
(a) Ferrous metals and alloys	1,793,719	2,366,446	2,190,000	176,446	+396,281
(b) Nonferrous metals	3,585,125	3,805,675	3,660,000	145,675	+74,875
(c) Nonmetallic minerals	833,294	1,019,799	900,000	119,799	+66,706
(d) Mineral research, unclassified	915,854	966,142	860,000	106,142	−55,854
3. Control of fires in inactive coal deposits	354,925	354,925	350,900	4,025	−4,025
Total, conservation and development of mineral resources	18,657,000	20,500,000	17,350,000	3,150,000	−1,307,000
Health and safety:					
1. Investigation of accidents and rescue work	849,370	850,000	850,000		+630
2. Mine inspections and investigations	2,987,440	4,125,000	3,700,000	425,000	+712,560
3. Explosives and explosions testing and research	509,190	555,000	510,000	45,000	+810
Total, health and safety	4,346,000	5,530,000	5,060,000	470,000	+714,000

Department of the Interior, summary of 1953 appropriations compared with 1954 original and revised estimates by activities—Continued

	Appropriation, 1953 (adjusted)	Original estimate, 1954	Revised estimate, 1954	Reduction	Increase (+) or decrease (−), revised estimate, 1954 compared with appropriation, 1953, adjusted
BUREAU OF MINES—continued					
Construction:					
1. New laboratory facilities	$750,000	$1,560,000	$225,000	$1,335,000	−$525,000
2. Synthetic liquid fuels	250,000	200,000	200,000		−50,000
Total, construction	1,000,000	1,760,000	425,000	1,335,000	−575,000
Construction (liquidation of contract authorization)	2,600,000				−2,600,000
General administrative expenses	1,278,000	1,325,000	1,325,000		+47,000
Total, Bureau of Mines	27,881,000	29,115,000	24,160,000	4,955,000	−3,721,000
NATIONAL PARK SERVICE					
Management and protection:					
1. Management of park and other areas	6,922,820	8,000,000	8,000,000		+1,077,180
2. Forestry and fire control	653,400	690,000	690,000		+36,600
3. Soil and moisture conservation	91,200	100,000	100,000		+8,800
4. Park and recreation programs	848,362	920,000	865,000	55,000	+16,638
5. Concessions management	270,768	290,000	290,000		+19,232
Total, management and protection	8,786,550	10,000,000	9,945,000	55,000	+1,158,450
Maintenance and rehabilitation of physical facilities:					
1. Roads and trails	4,138,495	4,600,000	4,600,000		+461,505
2. Buildings, utilities and other facilities	3,864,875	4,600,000	4,600,000		+735,125
Total, maintenance and rehabilitation of physical facilities	8,003,370	9,200,000	9,200,000		+1,196,630
Construction:					
1. Parkways	8,104,700	4,269,000	2,544,000	1,725,000	−5,560,700
2. Roads and trails	4,674,740	4,510,000	4,010,000	500,000	−664,740
3. Buildings, utilities and other facilities	1,911,510	5,550,000	4,050,000	1,500,000	+2,138,490
4. Acquisition of lands and water rights:					
(a) Lands	324,500	3,565,000	3,515,000	50,000	+3,190,500
(b) Water rights	14,960	25,000	25,000		+10,040
Total, construction	15,030,410	17,919,000	14,144,000	3,775,000	−886,410
Construction (liquidation of contract authorization)		1,500,000	1,500,000		+1,500,000
General administrative expenses:					
1. Departmental expenses	778,765	796,765	796,765		+18,000
2. Regional office expenses	563,235	603,235	583,235	20,000	+20,000
Total, general administrative expenses	1,342,000	1,400,000	1,380,000	20,000	+38,000
Total, National Park Service	33,162,330	40,019,000	36,169,000	3,850,000	+3,006,670
FISH AND WILDLIFE SERVICE					
Management of resources:					
1. Administration of fish and game laws	1,727,876	1,727,876	1,700,000	27,876	−27,876
2. Propagation and distribution of food fishes	2,427,058	2,757,058	2,700,000	57,058	+272,942
3. Mammal and bird reservations	1,843,872	1,958,872	1,708,000	250,872	−135,872
4. River basin studies	279,250	342,250	300,000	42,250	+20,750
5. Control of predatory animals and injurious rodents	949,236	964,236	950,000	14,236	+764
6. Soil and moisture conservation	98,083	124,708	98,000	26,708	−83
Total, management resources	7,325,375	7,875,000	7,456,000	419,000	+130,625
Investigation of resources:					
1. Research on fish and fisheries	2,711,778	2,501,778	2,470,000	31,778	−241,778
2. Exploration, development and utilization of fishery resources	1,108,192	1,166,229	1,140,000	26,229	+31,808
3. Research on birds and mammals	479,478	511,993	493,000	18,993	+13,522
Total, investigation of resources	4,299,448	4,180,000	4,103,000	77,000	−196,448

Department of the Interior, summary of 1953 appropriations compared with 1954 original and revised estimates by activities—Continued

	Appropriation, 1953 (adjusted)	Original estimate, 1954	Revised estimate, 1954	Reduction	Increase (+) or decrease (−), revised estimate, 1954 compared with appropriation, 1953, adjusted
FISH AND WILDLIFE SERVICE—continued					
Construction:					
1. Fish facilities	$378,000	$275,000	$75,000	$200,000	−$303,000
2. Wildlife facilities	295,800	30,000	30,000		−265,800
Total, construction	673,800	305,000	105,000	200,000	−568,800
General administrative expenses:					
1. Departmental expenses	443,065	443,065	443,055		−10
2. Regional office expenses	455,133	481,935	454,945	27,000	−188
Total, general administrative expenses	898,198	925,000	898,000	27,000	−198
Total, Fish and Wildlife Service	13,196,821	13,285,000	12,562,000	723,000	−634,821
OFFICE OF TERRITORIES					
Administration of Territories:					
1. Territory of Alaska:					
(a) Governor's Office	112,760	102,000	100,000	2,000	−12,760
(b) Legislative expenses	48,000				−48,000
(c) Care and custody of Alaskan insane	559,600	559,600	559,600		
2. Territory of Hawaii:					
(a) Governor's Office	42,216	42,200	42,200		−16
(b) Legislative expenses	46,700				−46,700
3. Virgin Islands:					
(a) Governor's Office	313,250	372,000	372,000		+58,750
(b) Grants to municipalities	745,000	745,000	745,000		
4. Guam:					
(a) Governor's office	63,700	58,500	58,500		−5,200
(b) Legislative expenses	23,300	23,300	23,300		
(c) Administration of sec. 26 (c), Public Law 630, 81st Cong	150,000				−150,000
5. American Samoa:					
(a) Governor's Office	50,254	56,400	56,400		+6,146
(b) Grants	1,290,000	1,534,000	1,434,000	100,000	+144,000
(c) Legislative expenses	27,000	27,000	27,000		
(d) Chief justice and high court	33,675	32,600	32,600		−1,075
6. Canton Island administration	17,000	17,200	17,200		+200
7. General administration	304,082	340,200	325,000	15,200	+20,918
Total, administration of Territories	3,826,537	3,910,000	3,792,800	117,200	−33,737
Trust Territory of the Pacific Islands:					
1. High Commissioner's Office	58,904	59,000	59,000		+96
2. Judiciary	39,000	56,000	56,000		+17,000
3. Grants	5,125,846	8,385,000	5,810,000	2,575,000	+684,154
Total, Trust Territory of the Pacific Islands	5,223,750	8,500,000	5,925,000	2,575,000	+701,250
Alaska public works:					
1. Construction	12,554,200	13,725,000	9,230,000	4,495,000	−3,324,200
2. Advance planning		600,000	200,000	400,000	+200,000
3. Administration	654,000	675,000	570,000	105,000	−84,000
Total, Alaska public works	13,208,200	15,000,000	10,000,000	5,000,000	−3,208,200
Construction of roads, Alaska:					
1. Preparation of plans	300,000	550,000	550,000		+250,000
2. Construction in progress	13,790,000	15,650,000	13,000,000	2,650,000	−790,000
3. Reconstruction	1,250,000	1,250,000	800,000	450,000	−450,000
4. New construction	1,660,000	950,000	250,000	700,000	−1,410,000
Total, construction of roads, Alaska	17,000,000	18,400,000	14,600,000	3,800,000	−2,400,000

Department of the Interior, summary of 1953 appropriations compared with 1954 original and revised estimates by activities—Continued

	Appropriation, 1953 (adjusted)	Original estimate, 1954	Revised estimate, 1954	Reduction	Increase (+) or decrease (−), revised estimate, 1954 compared with appropriation, 1953, adjusted
OFFICE OF TERRITORIES—continued					
Operation and maintenance of roads, Alaska:					
1. Major roads	$1,734,120	$2,044,130	$2,044,130		+$310,010
2. Local and feeder roads	1,523,565	1,305,870	1,305,870		−217,695
3. Shop facilities	60,315	50,000	50,000		−10,315
Total, operation and maintenance of roads, Alaska	3,318,000	3,400,000	3,400,000		+82,000
Virgin Islands public works:					
1. Construction of projects	999,680	1,000,000	1,000,000		+320
2. Administration	100,000	100,000	100,000		
Total, Virgin Islands public works	1,099,680	1,100,000	1,100,000		+320
Virgin Islands public works (liquidation of contract authorization)	1,467,000				−1,467,000
Construction, Alaska Railroad:					
1. Construction	3,906,000	16,311,000	2,715,000	$13,596,000	−1,191,000
Total, Office of Territories	49,049,167	66,621,000	41,532,800	25,088,200	−7,516,367
VIRGIN ISLANDS CORPORATION					
Grants, Virgin Islands Corporation:					
1. Operating losses	111,000	987,925	987,925		+876,925
2. Progress not predominantly of a revenue-producing character	130,000	182,075	92,075	90,000	−37,925
Total grants, Virgin Islands Corporation	241,000	1,170,000	1,080,000	90,000	+839,000
Revolving fund, Virgin Islands Corporation	1,515,000	1,375,000	1,375,000		−140,000
Total, Virgin Islands Corporation	1,756,000	2,545,000	2,455,000	90,000	+699,000
ADMINISTRATION, DEPARTMENT OF THE INTERIOR					
Salaries and expenses:					
1. Departmental direction	271,424	273,924	271,424	2,500	
2. Program direction and coordination	903,250	972,000	903,250	68,750	
3. Administrative management services	928,193	978,523	928,193	50,330	
4. Legal services	325,847	339,267	325,847	13,420	
5. General services	96,286	96,286	96,286		
Total, salaries and expenses	2,525,000	2,660,000	2,525,000	135,000	
Grand total, Department of the Interior	[1] 542,447,501	[2] 607,251,400		[3] 69,050,200	

[1] Includes $627,500 and $376,000 appropriated in the supplemental appropriation act, 1953, and the second supplemental appropriation act, 1953, respectively.
[2] Includes Bureau of Reclamation original estimate.
[3] Excludes Bureau of Reclamation reduction.

Mr. JENSEN. All right, thank you, gentlemen.

That concludes the hearings for the Department of the Interior.

We will "mark up" the bill, or, I might say, "mark down" the bill, so to speak—I might as well be honest about it, because that is what is going to happen—after the Easter recess, and then, as soon after that as we can possibly do so, the bill will be brought to the floor of the House for consideration.

Thank you, gentlemen.

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